

INJURIES IN ALASKA: A Focus on Disparities

**Part II, Injury Hospitalizations,
1994-1999**

July 2003

Table of Contents

Introduction

- Project Description

- Partners

- Goals & Background

Methods

Findings

- Injury Hospitalizations for Selected Populations

- Racial and Regional Disparities in Injury Hospitalization Rates, Major Causes of Injury

- Unintentional Injury

 - Unintentional Injury Hospitalization Rates

 - Trends in Disparities among Unintentional Injury Hospitalization Rates

- Suicide Attempt

 - Suicide Attempt Hospitalization Rates

 - Trends in Disparities among Suicide Attempt Hospitalization Rates

- Assault

- Assault Hospitalization Rates

 - Trends in Disparities among Assault Hospitalization Rates

- Disparities in Injury Hospitalization Rates by Specific Cause

- Firearms Involvement in Hospitalization for Unintentional Injury, Suicide Attempt, and Assault

Table of Contents (cont'd)

Findings (continued)

Substance-Involvement in Hospitalization for Unintentional Injury, Suicide Attempt, and Assault

Fatality of Hospitalization for Unintentional Injury, Suicide Attempt, and Assault

Examining the High rate of Assaults to Women 20-44 and 75+

Region of Residence by Region of Injury Occurrence

The Alaska Women & Children Injury Disparities Project

- In 2001, the Maternal Child Health Bureau of the Health Resources and Services Administration funded a 2-year project to describe and reduce injury disparities experienced by Alaskan youth and young adult women, the Alaska Women and Children Injury Disparities Project.
- The project was housed in the Division of Public Health (DPH), Alaska Department of Health and Social Services. The two main project staff from DPH are:
 - Alice Rarig, MA, MPH, PhD
 - Andrea Fenaughty, MA, PhD
- The following individuals were also critical to the development of the project:
 - Susan Keady, RN, MS, Division of Public Health
 - Catherine Schumacher, MD, MSPH, Alaska Native Tribal Health Consortium

Project Partners

A group of professionals already involved in injury prevention and control in Alaska were brought together at the start of the project to form an advisory group that would provide ongoing guidance to DPH staff. Representatives from the following organizations were included in the Injury Disparities Advisory Group (IDAG):

- Alaska Bureau of Vital Statistics <http://www.hss.state.ak.us/dph/bvs/>
- Alaska Department of Health and Social Services, Section of Community Health and EMS Injury Prevention Program http://www.chems.alaska.gov/ems_injury_prevention.htm
- Alaska Department of Health and Social Services, Section of Community Health and EMS Trauma Registry <http://www.chems.alaska.gov/ems%5Ftrauma%5Fregistry.htm>
- Alaska Department of Health and Social Services, Section of Public Health Nursing <http://www.hss.state.ak.us/dph/nursing/default.htm>
- Alaska Department of Health & Social Services, Section of Maternal Child and Family Health Alaska Family Domestic Violence Prevention Program <http://www.hss.state.ak.us/dph/mcfh/akfvpp>
- Alaska Injury Prevention Center <http://www.alaska-ipc.org>
- Alaska Native Epidemiology Center <http://www.anhb.org>
- Alaska Native Tribal Health Consortium <http://www.anthc.org>
- Suicide Prevention Council <http://www.hss.state.ak.us/suicideprevention>
- University of Alaska Anchorage, Institute on Social and Economic Research, Alaska Kids Count <http://www.kidscount.alaska.edu>

Project Goals and Background

- A primary goal of the injury disparities project was to describe racial and regional disparities in injuries among youth and women of childbearing age.
- Previous examinations of injury disparities in Alaska had been limited in scope, either looking at only a few indicators statewide or else focusing on only a select population.
- There was a need for a more systematic in-depth analysis of disparities, and a need to get this comprehensive analysis into the hands of the prevention specialists and service providers serving minorities, and both urban and rural at-risk groups.

Methods (I): Data

Data Sources for Injury Hospitalization Analysis:

- Department of Health and Social Services, Division of Public Health, Section of Community Health and EMS, Alaska Trauma Registry
 - Injury hospitalizations from 1994 through 1999
 - Hospital Discharge ICD-9 e-codes
 - Cause of Injury Hospitalization, Age, Sex, Race, Region of Residence, Region of Injury Occurrence, Alcohol Involvement, Fatal
- Department of Labor and Workforce Development, Research & Analysis Section
 - Population data

Age-Specific Rates: Injury Hospitalizations per 10,000 population for the age group

Methods (II): Definitions

- **Youth:** Alaskan residents, age 0-19
- **Young Adult Women/Women 20-44:** Female Alaskan residents, age 20-44
- **Young Adult Men/Men 20-44:** Male Alaskan residents, age 20-44
- **Adults 45+:** Alaskan residents age 45 or older

- **Disparities** are “differences that occur by gender, race or ethnicity, education or income, disability, living in rural locations or sexual orientation.” (*Healthy People 2010*) Conceptually, “disparities” can be separated into “unavoidable” and “potentially avoidable” disparities. Many potentially avoidable disparities are deemed to be unacceptable or unfair, especially when they are related to unequal access to information or care.

Methods (III): Definitions

Racial Disparities: Alaska Native-to-White comparisons

- 2 groups together comprise 85% of population, 91% of injury hospitalizations, and 96% of injury deaths
- Numbers of next largest groups (Blacks, Asian/ Pacific islanders) too small to analyze separately
- Results from analysis of “Other”-to-White disparities may have less applicability for prevention
- “Other” race group injury rates tend to fall between those of Alaska Natives and Whites; smaller disparity than seen when comparing Alaska Natives with Whites

Regional Disparities: Rural-to-Urban region of residence comparisons

- **Urban** = residents of Anchorage, Fairbanks, or Juneau Alaska
- **Rural** = residents of any other region in Alaska
- Rates of injury and patterns among rates relatively similar within Anchorage, Fairbanks, and Juneau, contrasted with rates in other regions of the state
- Region of residence may be more useful than region of injury occurrence in describing the burden of injury death; other analyses may want to focus on the region where the injury occurred

Methods (IV): Assessing Disparity

“Rate ratios” and “rate differences” are commonly used measures of health status disparities between groups.

- The **rate ratio (RR)** is quite self-explanatory – it is the ratio of two rates, usually the rate for the minority group over the rate for the reference group. The more rare the outcome is, the more dramatic the rate ratio may become despite the particular cause being of less importance than other causes.
- The **rate difference (RD)** is calculated by subtracting one rate from the other. The rate difference helps to quantify a disparity in a way that tells more about the difference in the burden of disease or death on the population. For example, for women, the the rate difference between rural and urban suicide attempt hospitalization rates is large, 7.7 per 10,000 (22.4 minus 14.7); however, the rate ratio for suicide attempt is only 1.5. Conversely, there is a relatively large rural-to-urban rate ratio for ATV injury hospitalizations among women (5.1), but because they are rare, the rate difference is only 1.2 (1.5 minus 0.3).

Injury Hospitalizations for Selected Populations

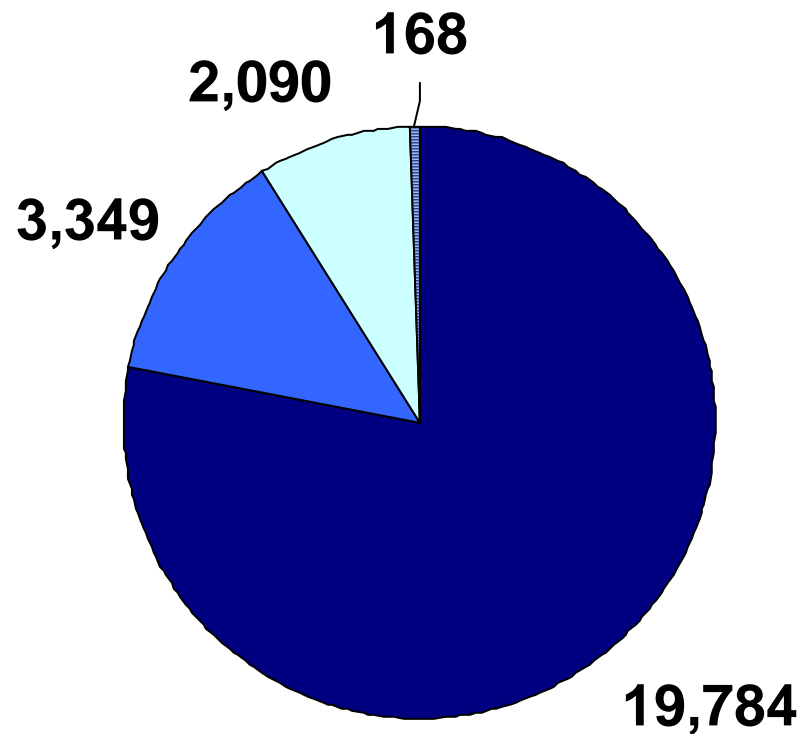
Alaska, 1994-1999

The Burden of Injury Hospitalizations on
Youth (0-19), Young Adult Women (20-44),
Men (20-44), Adults 45 and older

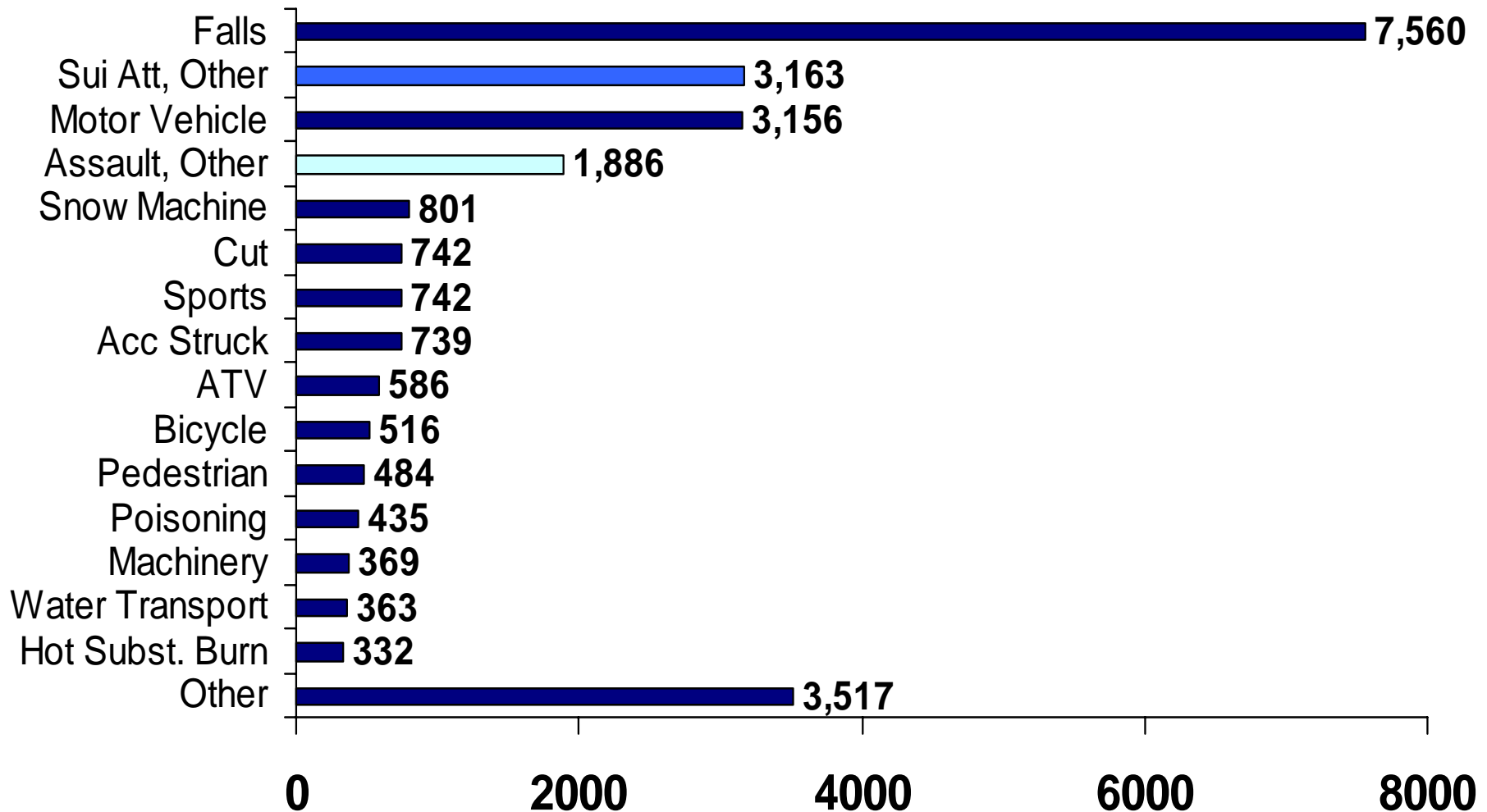
Injury Hospitalizations by Cause

Alaska Residents (N = 25,391), 1994-1999

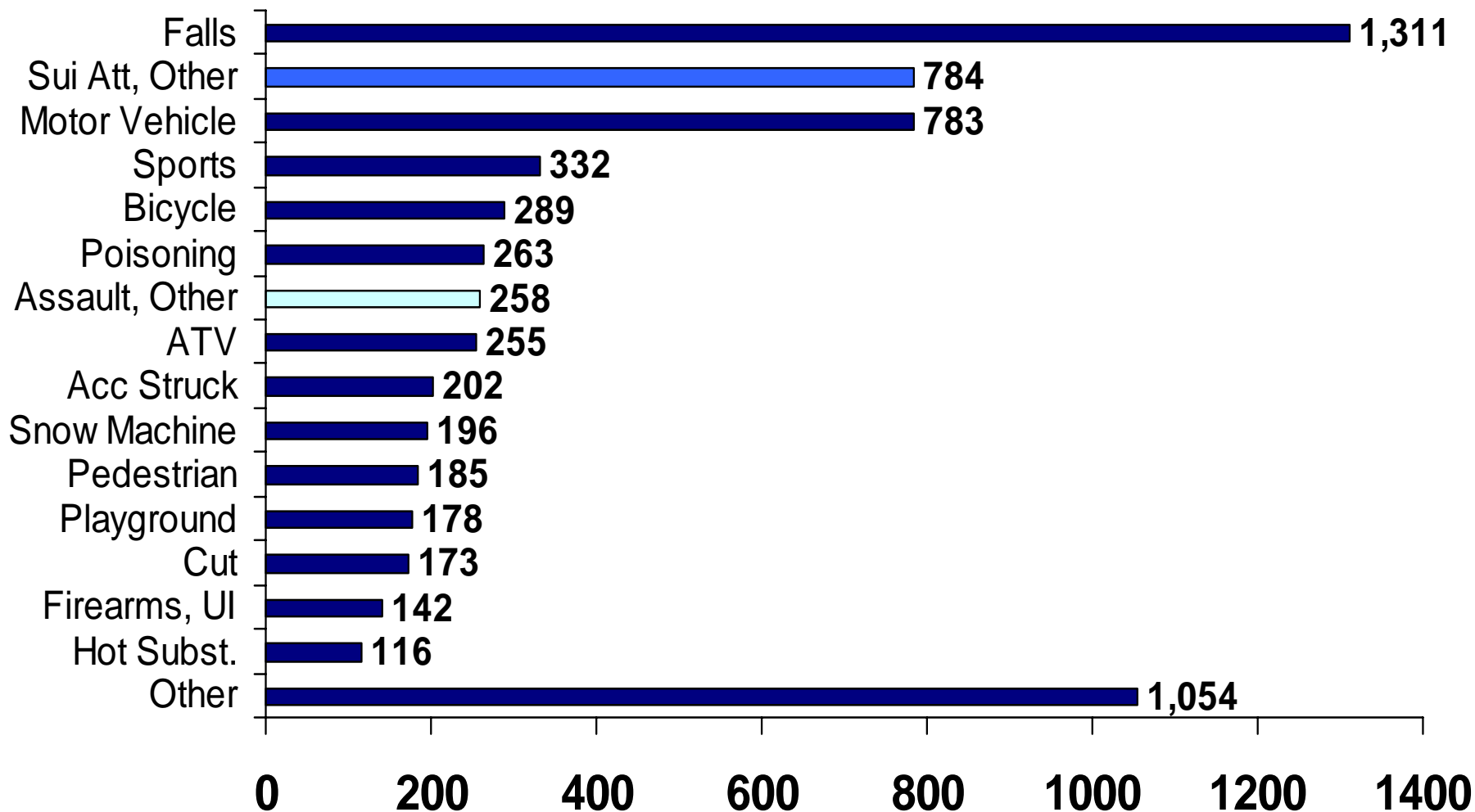
■ Unintentional ■ Suicide Attempt ■ Assault ■ Intent Unknown



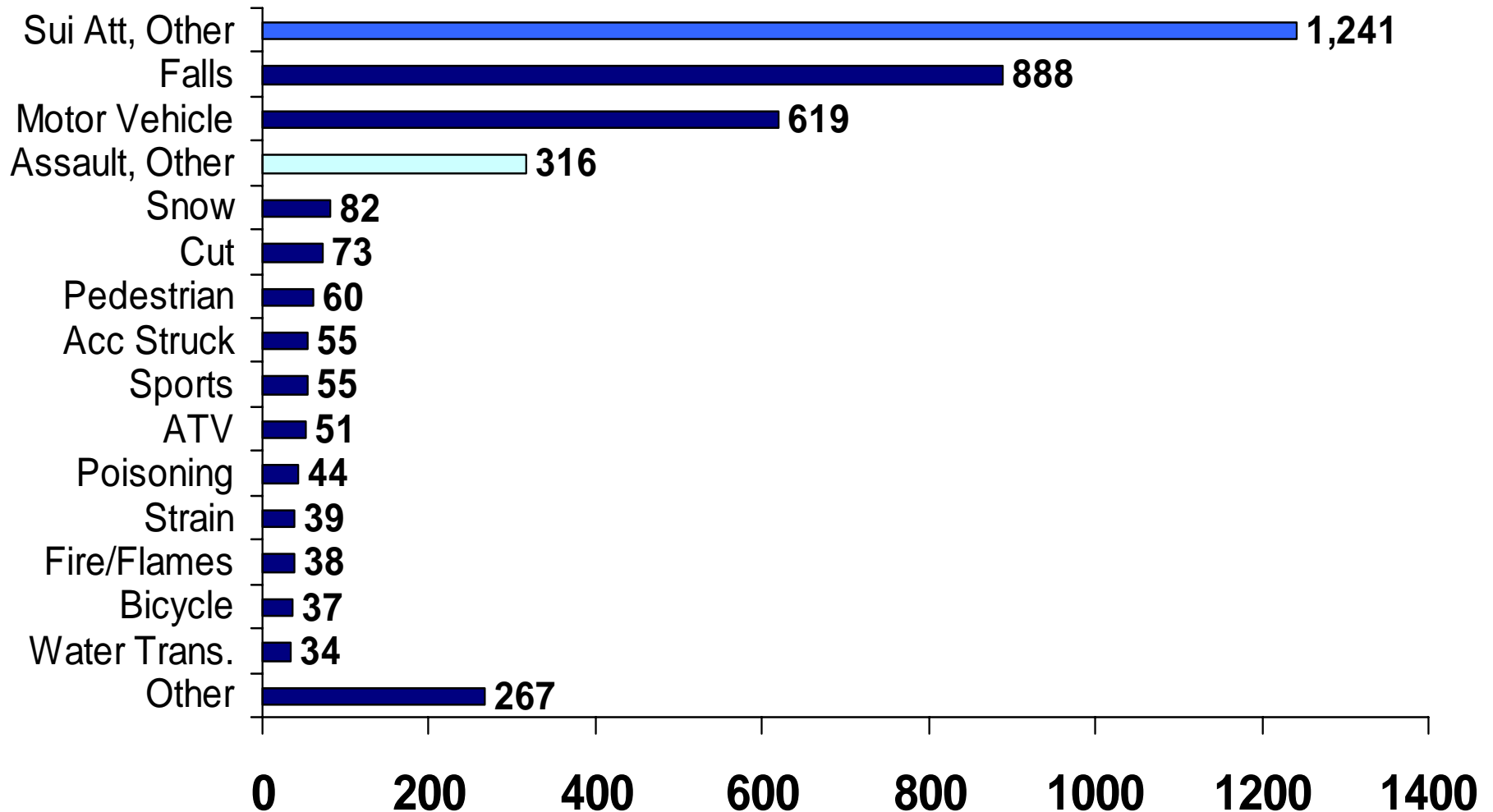
Injury Hospitalizations: Top 15 Causes of Injury for Total Population Alaska Residents (N =25,391), 1994-1999



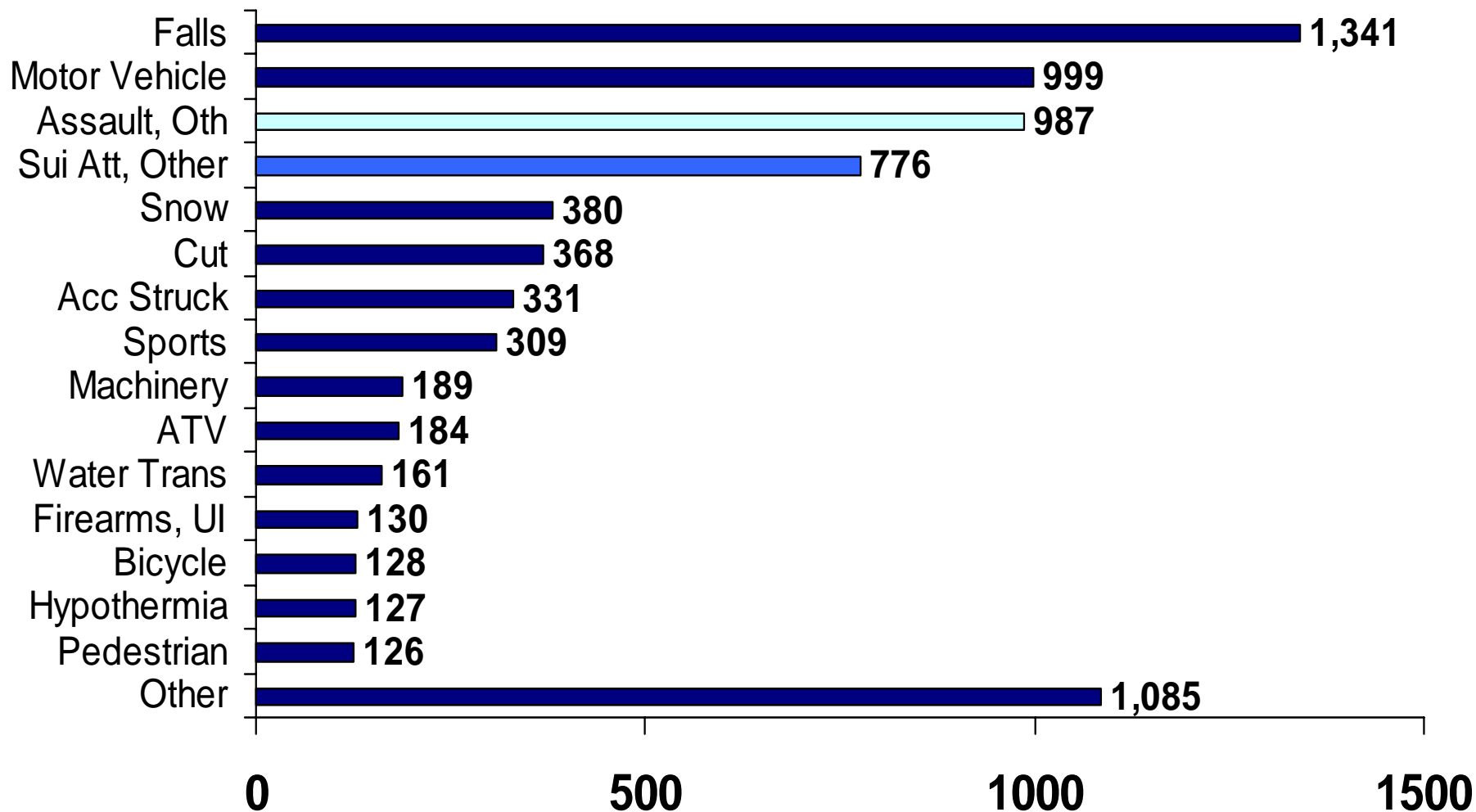
Injury Hospitalizations: Top 15 Causes of Injury for Youth 0-19 Alaska Residents (N =6,521), 1994-1999



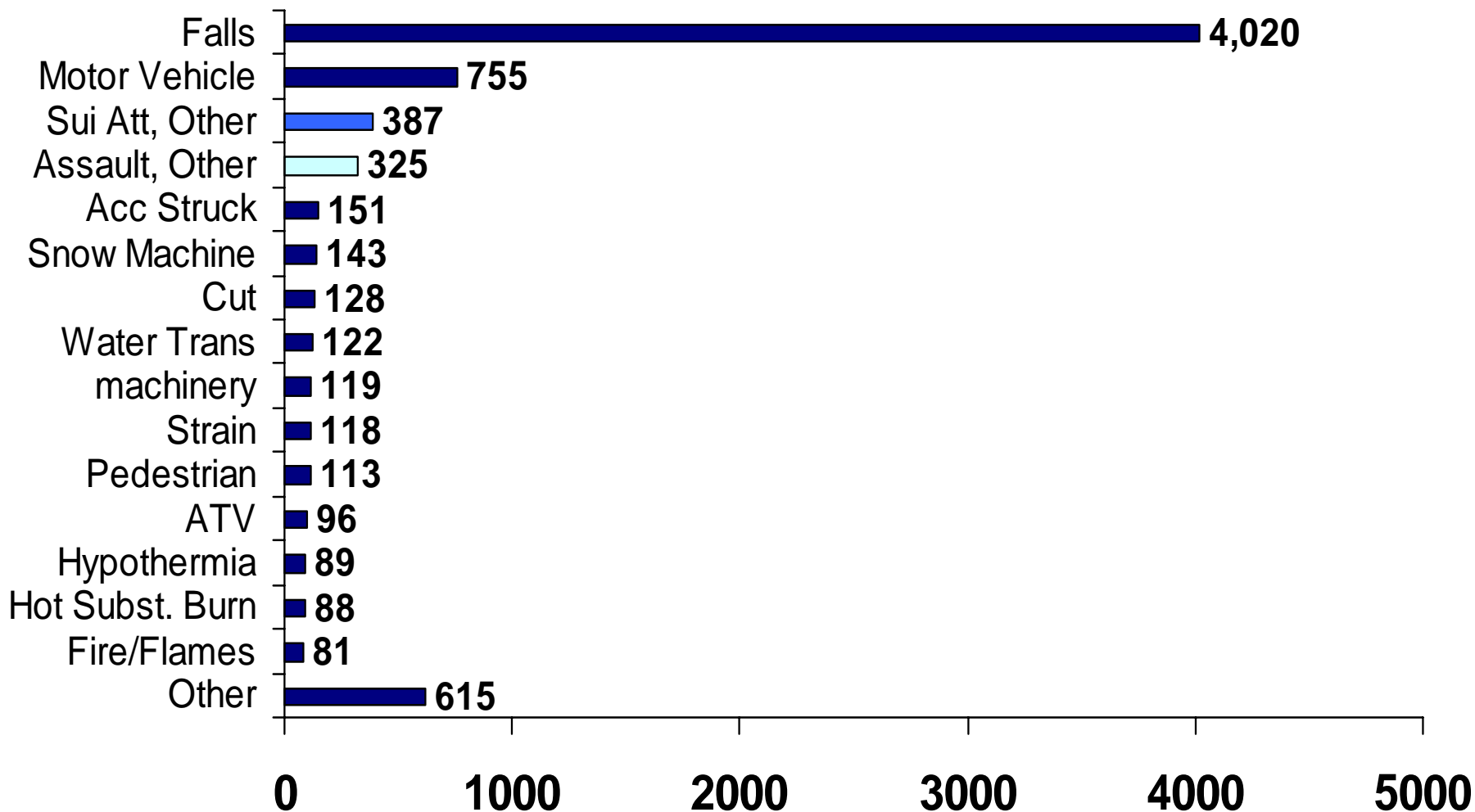
Injury Hospitalizations: Top 15 Causes of Injury for Women 20-44 Alaska Residents (N =3,899), 1994-1999



Injury Hospitalizations: Top 15 Causes of Injury for Men 20-44 Alaska Residents (N =7,621), 1994-1999

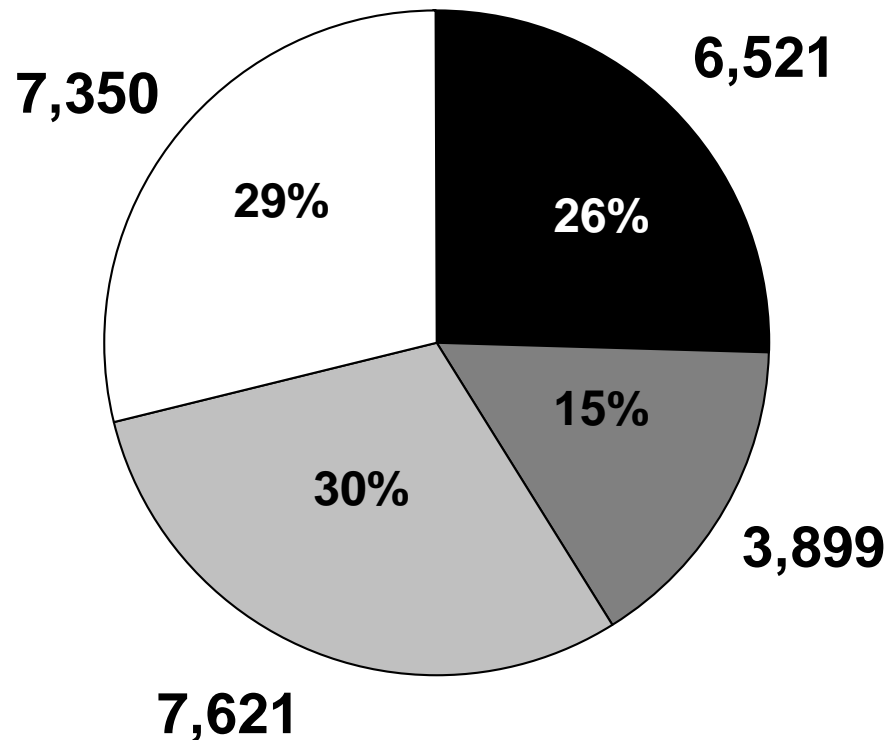


Injury Hospitalizations: Top 15 Causes of Injury for Adults 45+ Alaska Residents (N =7,350), 1994-1999



Injury Hospitalizations for Selected Groups Alaska Residents (N = 25,391), 1994-1999

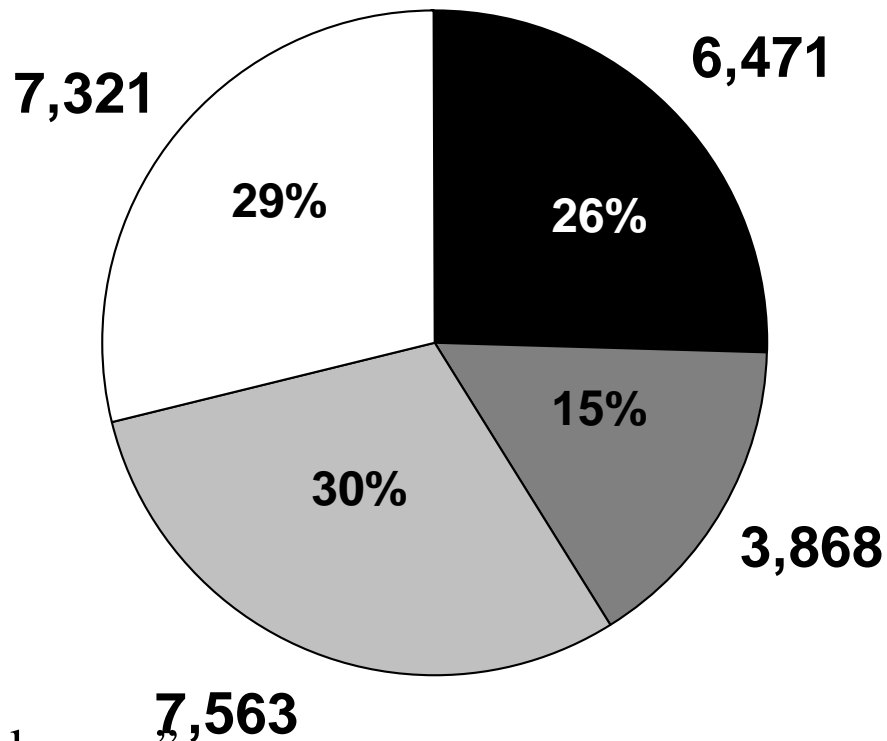
■ Youth, 0-19 ■ Women, 20-44 ■ Men, 20-44 □ 45+



Source: DHSS/CHEMS, AK Trauma
Registry

Injury Hospitalizations for Selected Groups Alaska Residents (N = 25,223*), 1994-1999

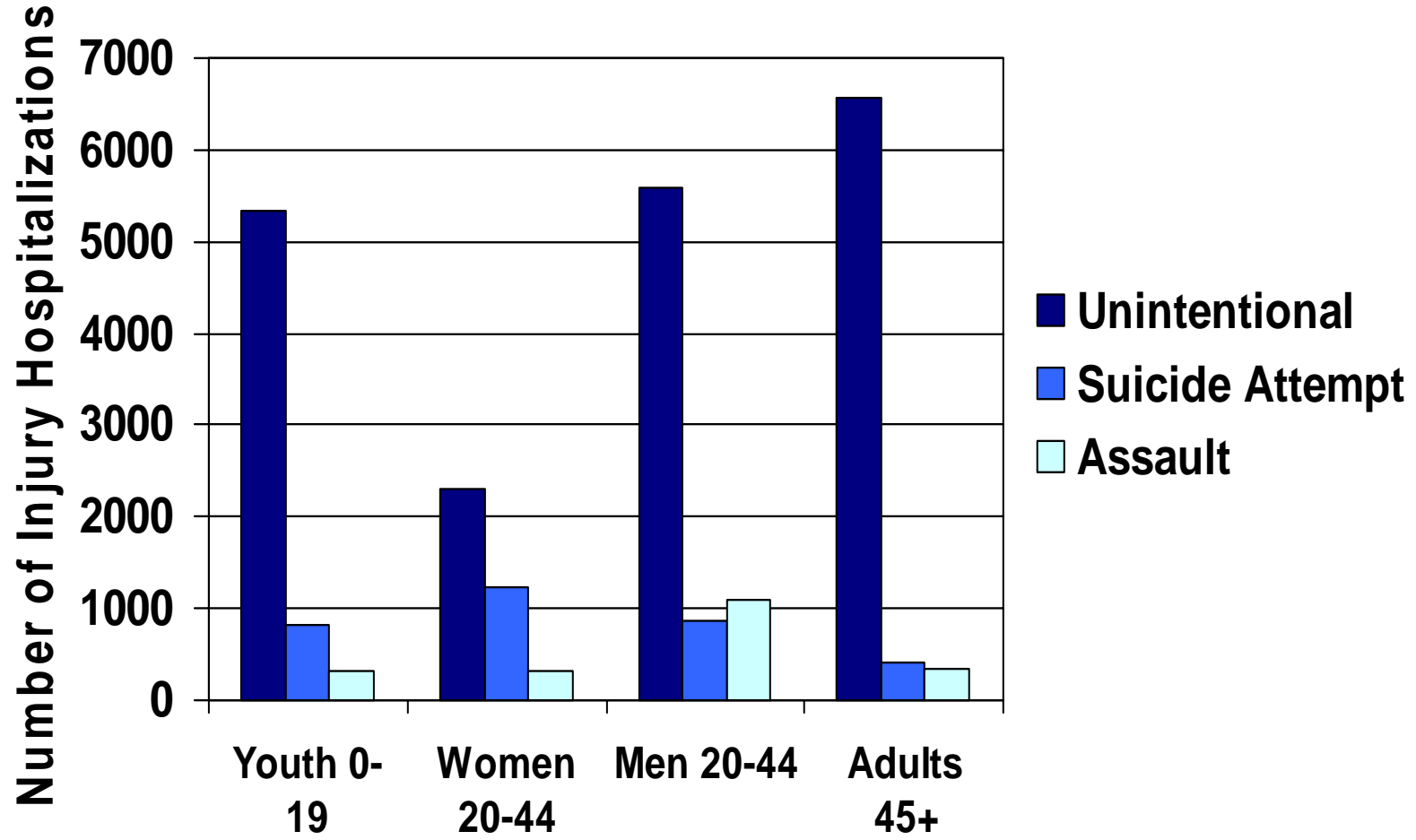
■ Youth, 0-19 ■ Women, 20-44 ■ Men, 20-44 □ 45+



*excludes "intent unknown"

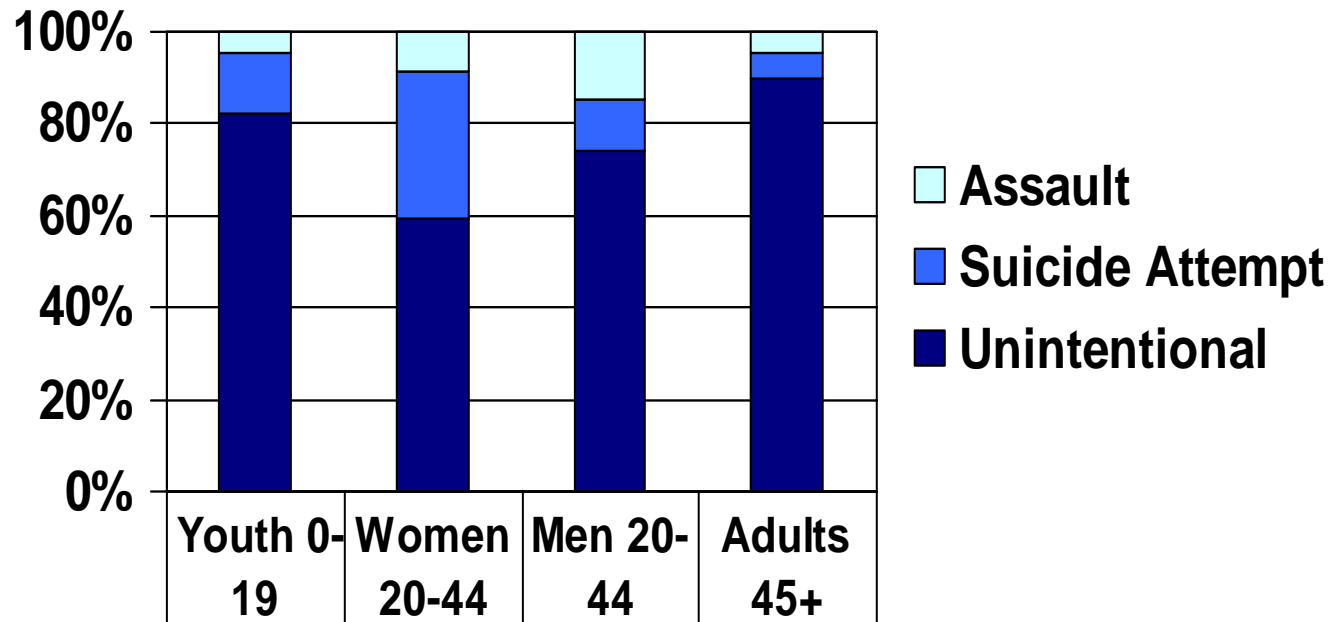
Source: DHSS/CHEMS, AK Trauma
Registry

Injury Hospitalizations by Cause and Target Population, Alaska Residents, 1994-1999



Injury Hospitalizations by Cause and Target Population, Alaska Residents, 1994-1999

Number of Injury Hospitalizations



Assault	311	330	1100	349
Suicide Attempt	831	1241	868	409
Unintentional	5329	2297	5595	6563

Summary: The Burden of Injury Hospitalization

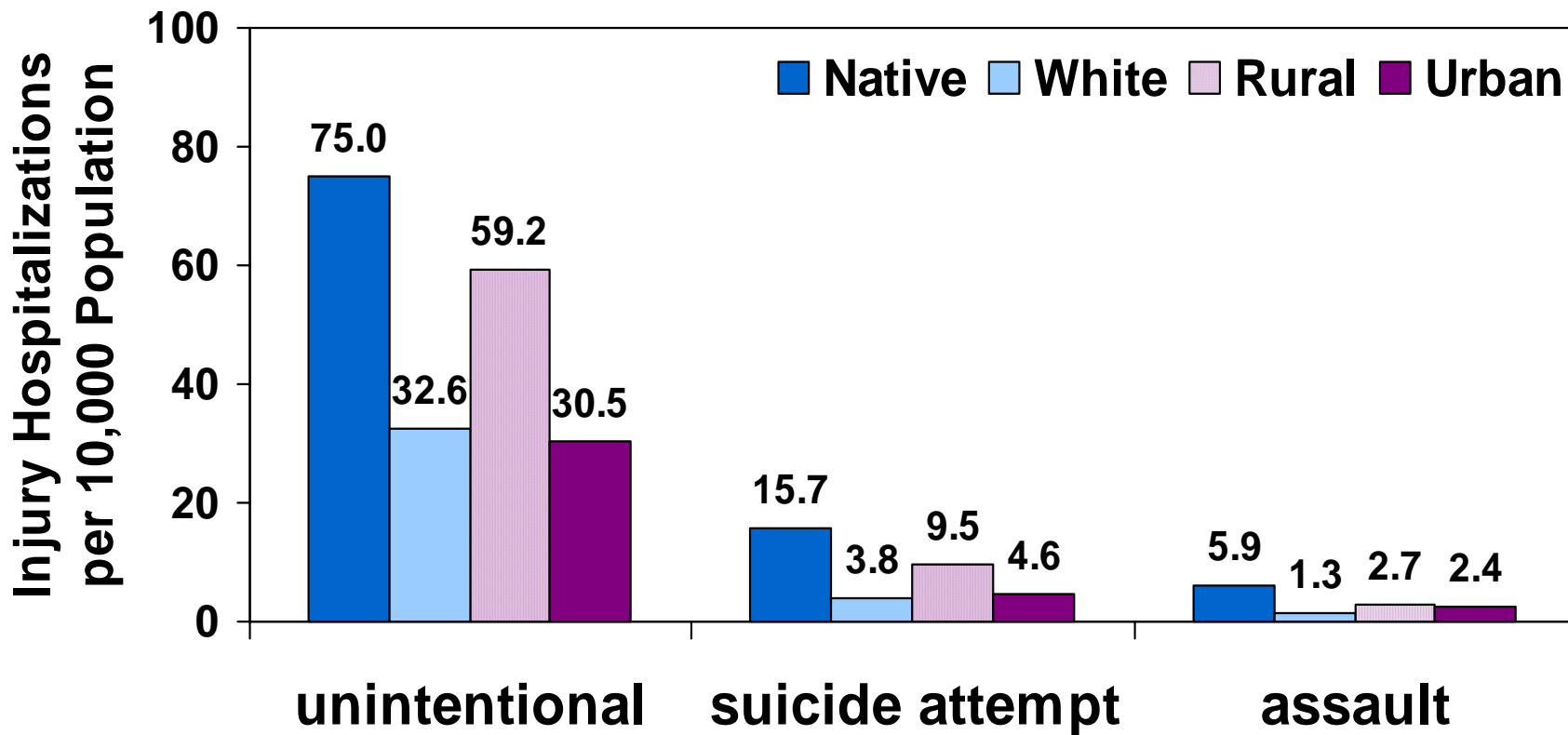
- ✓ There were 25,391 injury hospitalizations among Alaskans between 1994 and 1999, the majority of which were due to unintentional injuries.
- ✓ **Fall** was the most common specific cause of injury hospitalization among youth 0-19, men 20-44, and adults 45 and older; **suicide by means other than firearms** was the most common specific cause of injury hospitalization among women 20-44.
- ✓ Combined, Alaskan youth (0-19) and young adult women (20-44) accounted for 41% of all injury hospitalizations between 1994 and 1999.
- ✓ Suicide attempts make up a larger proportion of injury hospitalizations among women 20-44 compared to the proportion of suicide attempts among youth, men 20-44, or adults 45 and older.

Racial and Regional Disparities in Injury Hospitalization Rates

Major Causes of Injury Alaska, 1994-1999

Age Specific Rates,
Rate Ratios and Rate Differences
with focus on Youth (0-19), Women and Men 20-
44, and Older Adults (45 and older)

Racial and Regional Disparities in Injury Hospitalization Rates: *Youth 0-19, 1994-1999*



N:W RR = 2.3

R:U RR = 1.9

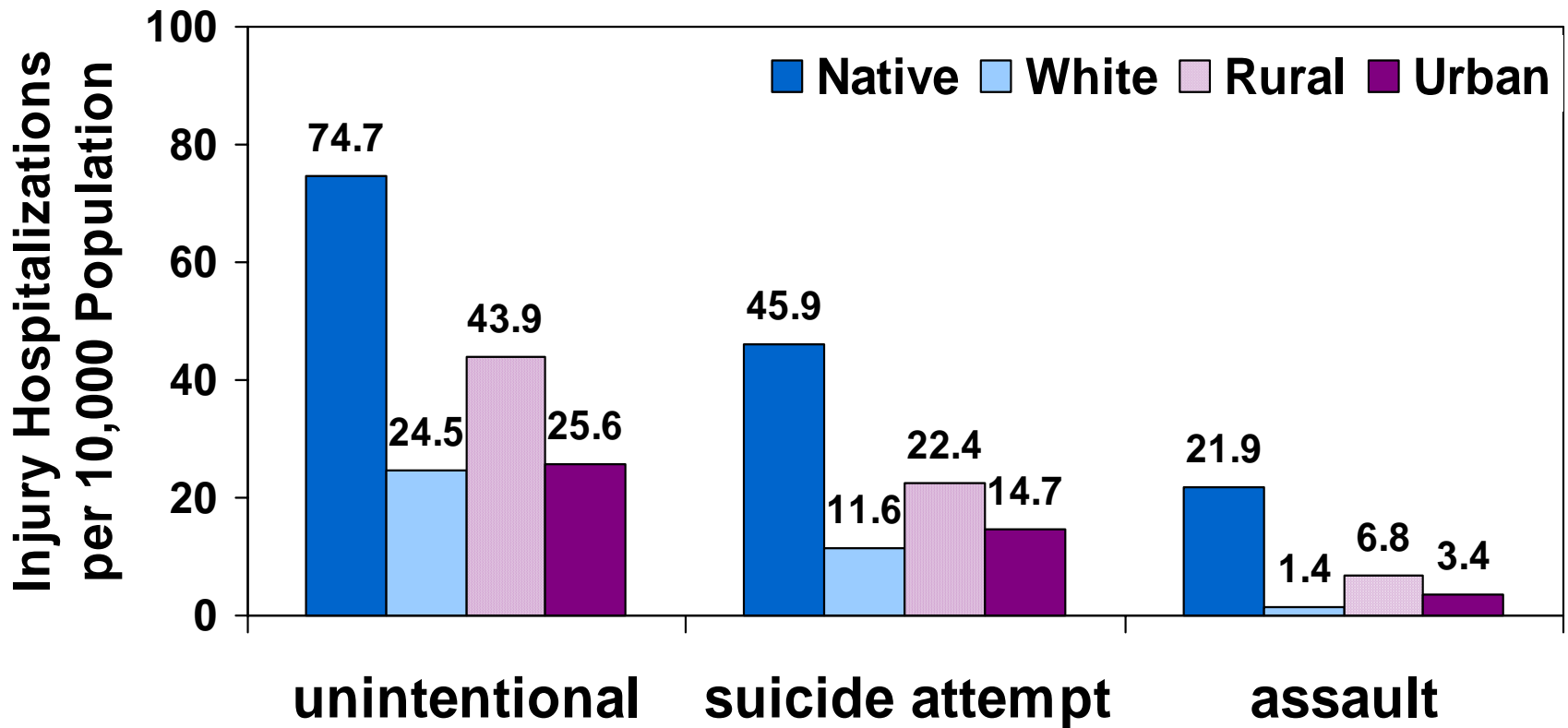
N:W RR = 4.2

R:U RR = 2.1

N:W RR = 4.6

R:U RR = 1.1

Racial and Regional Disparities in Injury Hospitalization Rates: *Women 20-44, 1994-1999*



N:W RR = 3.0

R:U RR = 1.7

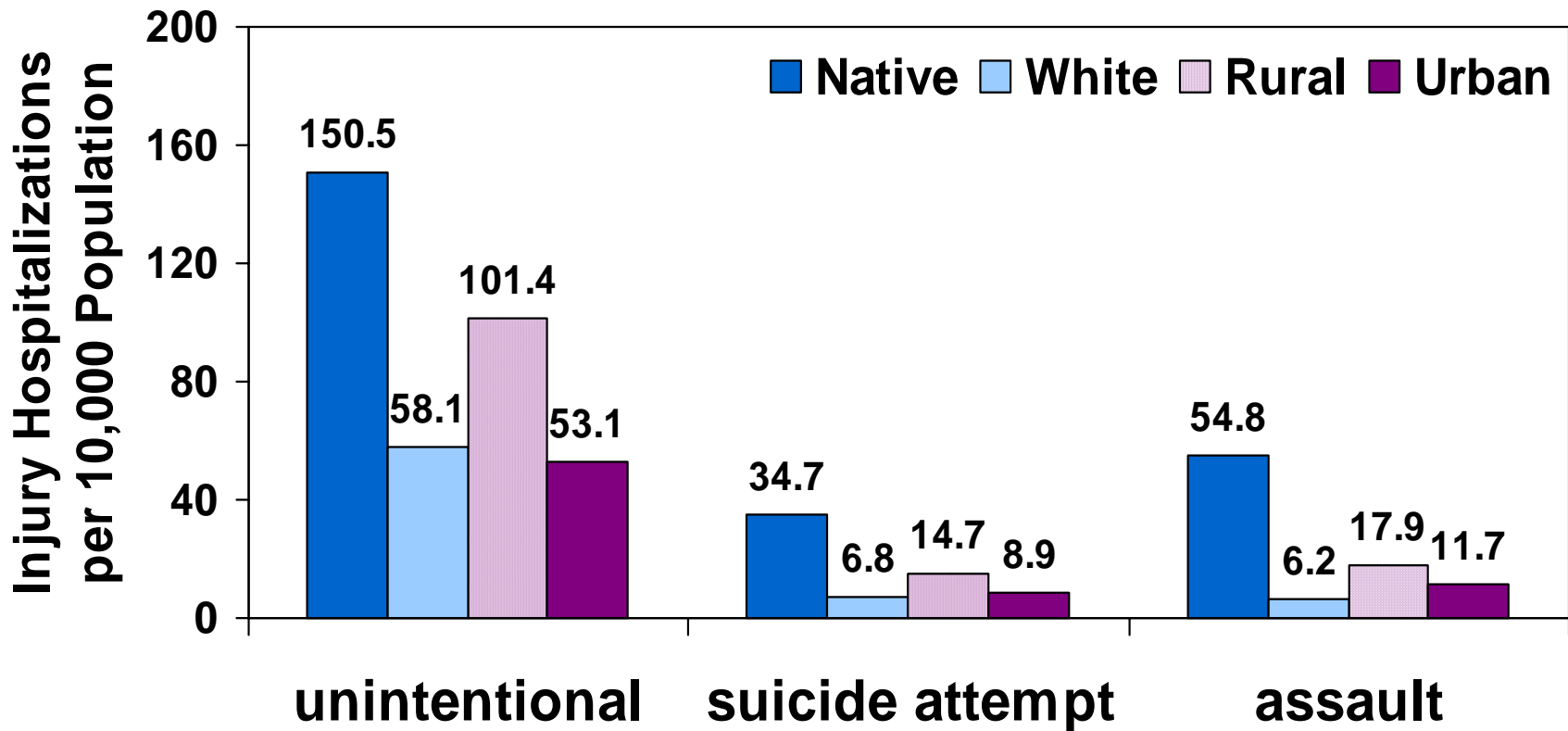
N:W RR = 4.0

R:U RR = 1.5

N:W RR = 16.2

R:U RR = 2.0

Racial and Regional Disparities in Injury Hospitalization Rates: *Men 20-44, 1994-1999*



N:W RR = 2.6

R:U RR = 1.9

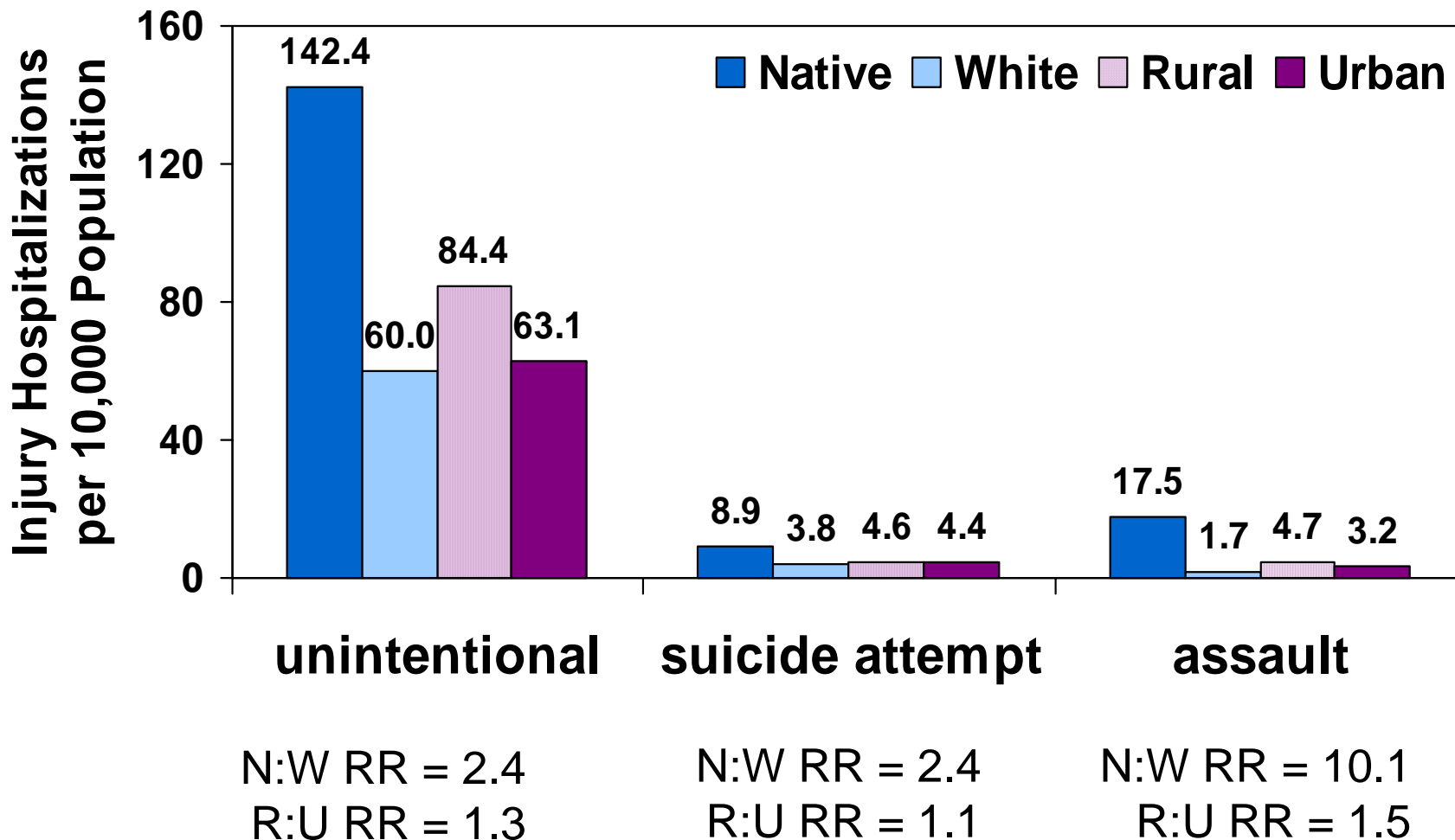
N:W RR = 5.1

R:U RR = 1.7

N:W RR = 8.9

R:U RR = 1.5

Racial and Regional Disparities in Injury Hospitalization Rates: *Adults 45+, 1994-1999*



Summary: Racial and Regional Disparities in Injury Hospitalization Rates

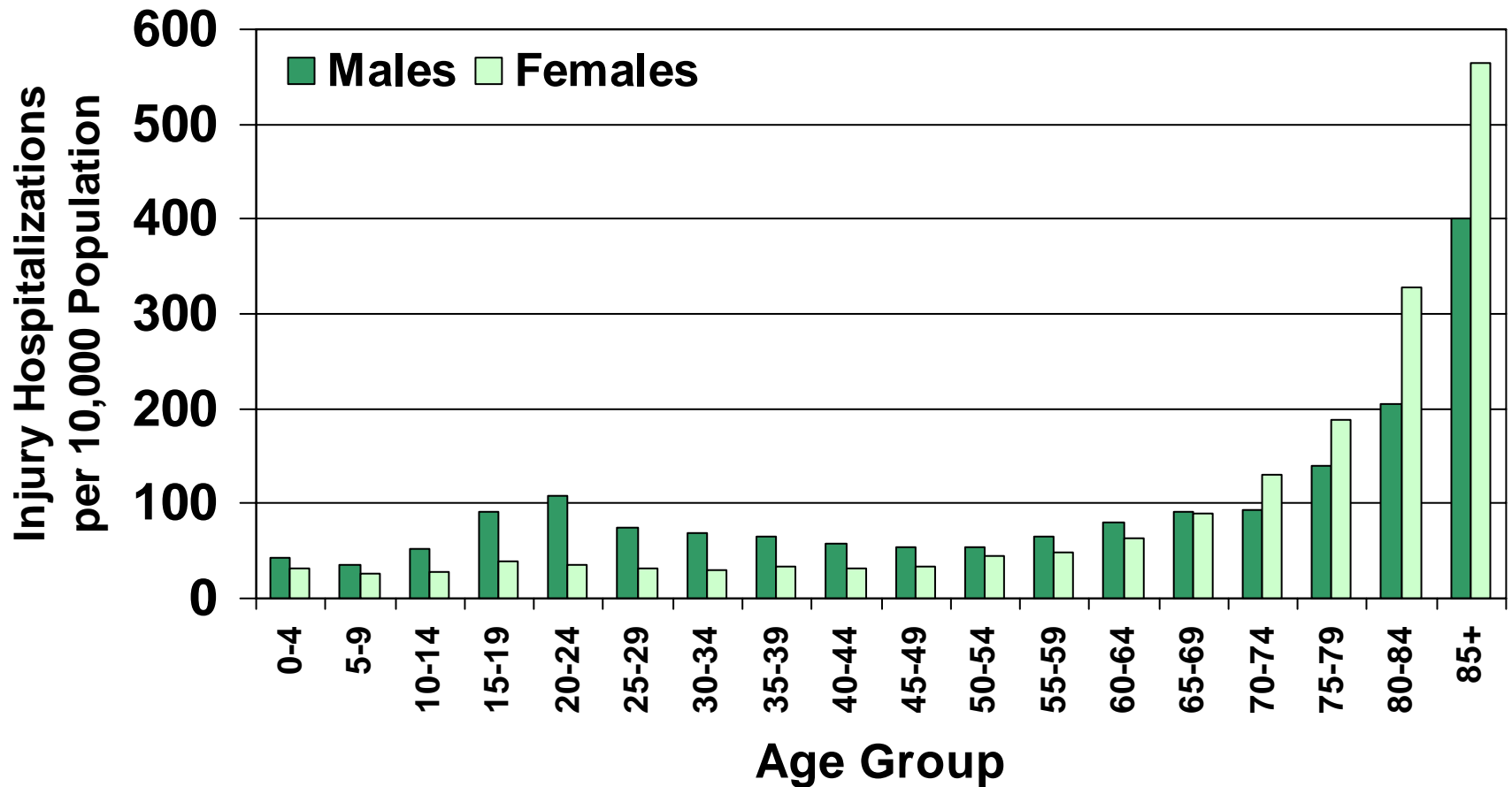
- ✓ Compared to Whites of the same sex and age group, Alaska Natives are:
 - ✓ 2 to 3 times as likely to be hospitalized for unintentional injuries,
 - ✓ 2 to 4 times as likely to be hospitalized for suicide attempt, and
 - ✓ 4 to 16 times as likely to be hospitalized for assault-related injuries.
- ✓ Regional (rural-to-urban) disparities also exist, but are somewhat smaller in magnitude.

Unintentional Injury Hospitalization Rates

Alaska, 1994-1999

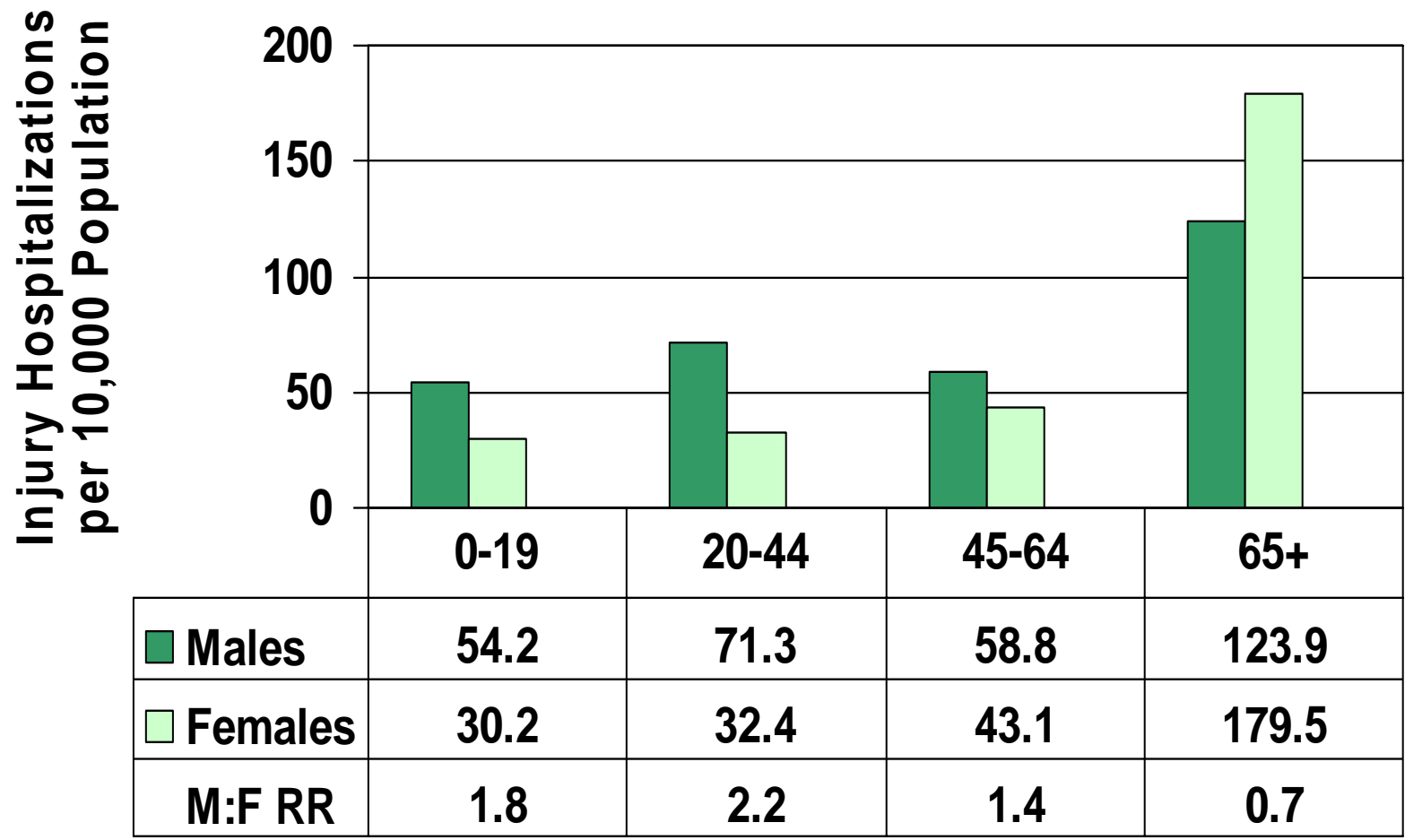
Age-Specific Rates by Sex, Race, and Region

Unintentional Injury Hospitalization Rate by Sex, 5-Year Age Groups, Alaska Residents, 1994-1999

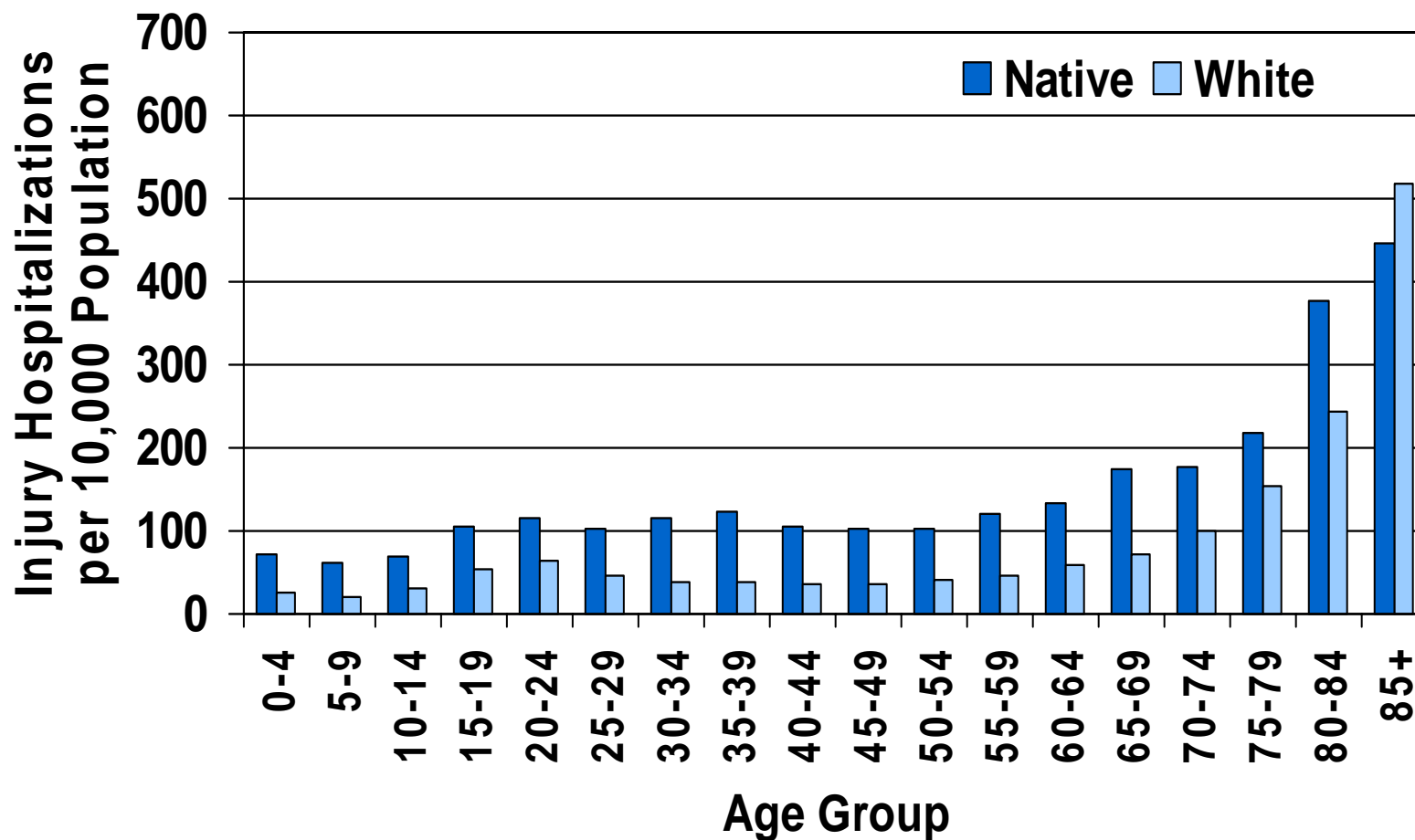


Unintentional Injury Hospitalization Rate by Age and Sex

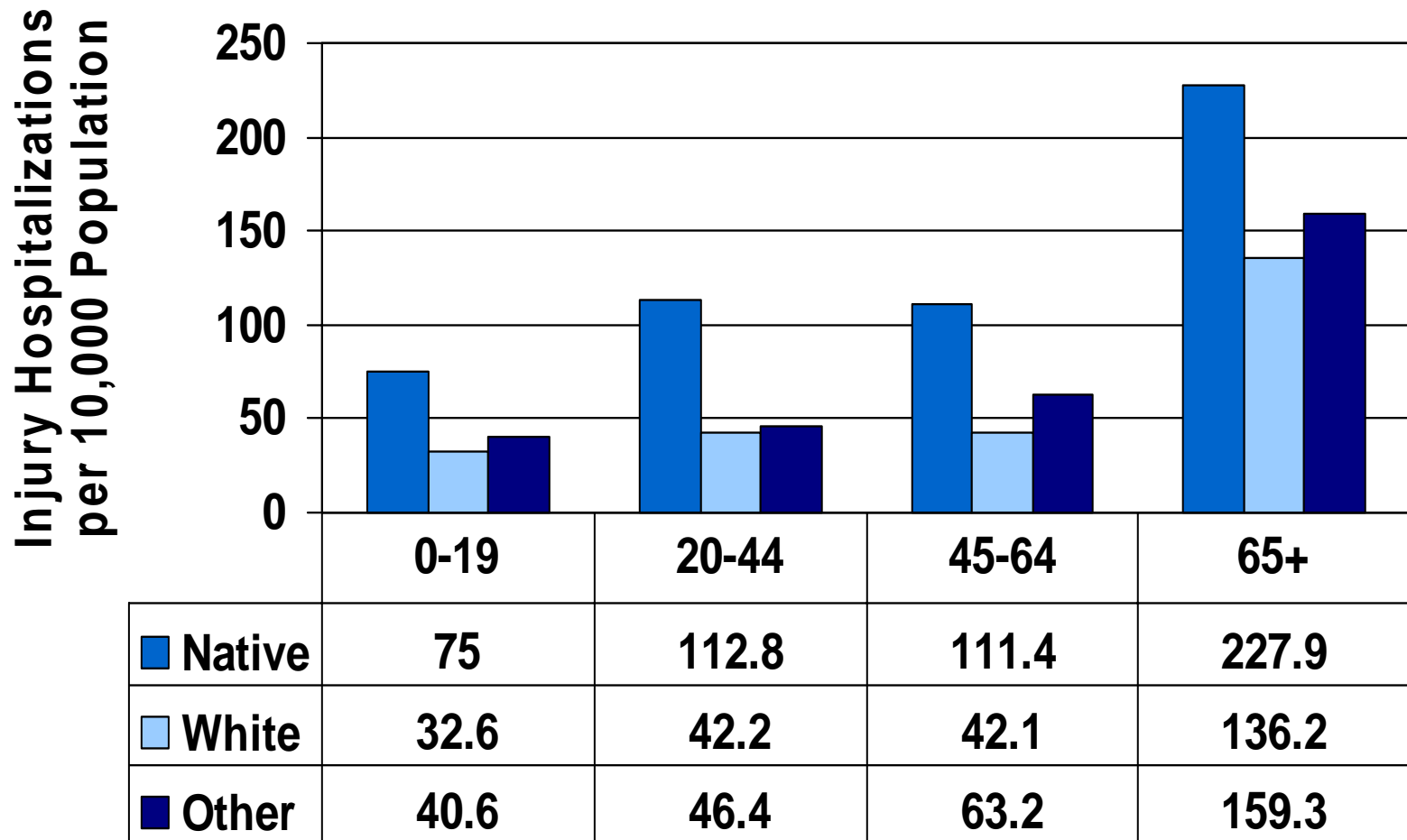
Alaska Residents, 1994-1999



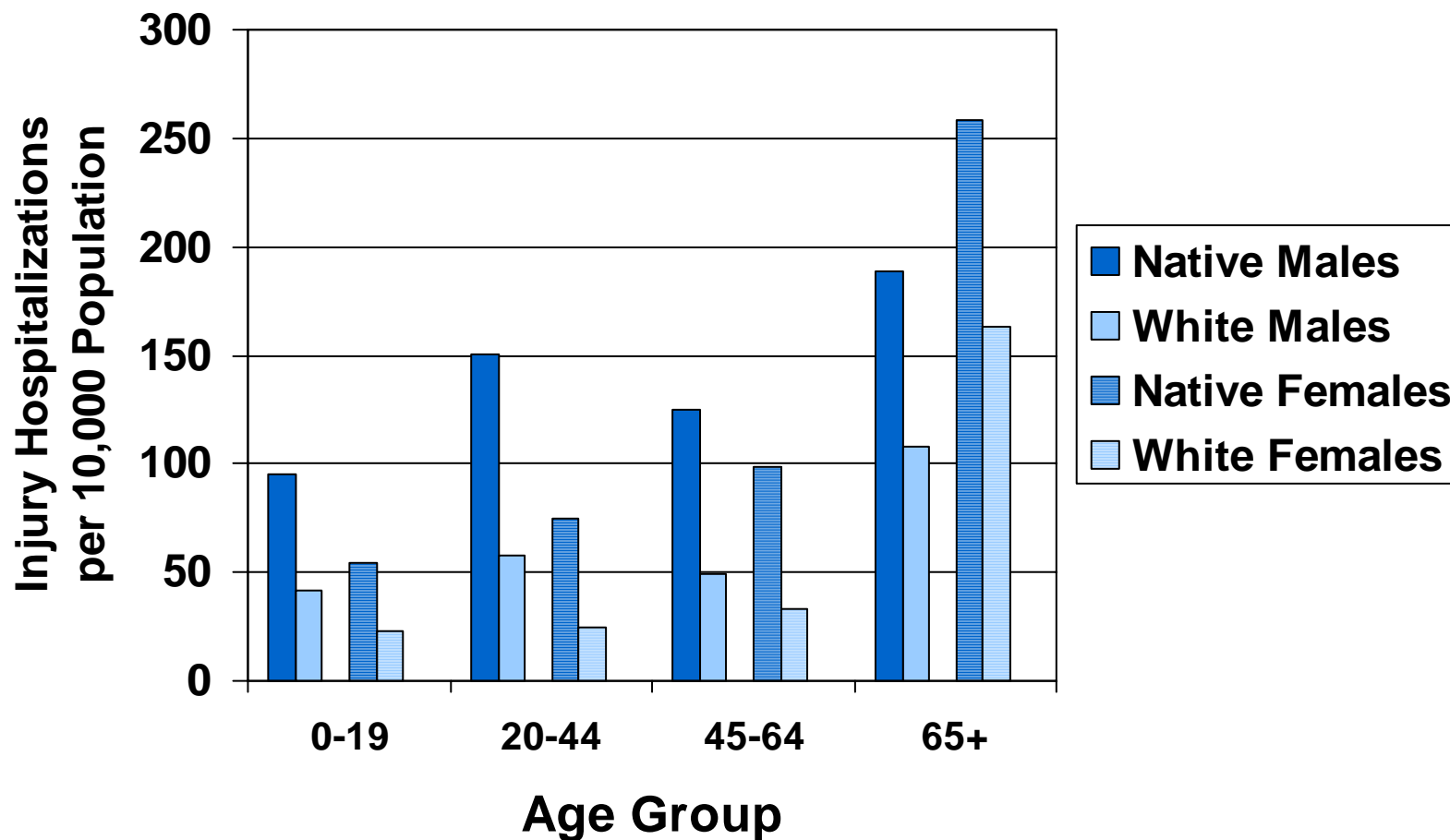
Unintentional Injury Hospitalization Rate by Race, 5-Year Age Groups Alaska Residents, 1994-1999



Unintentional Injury Hospitalization Rate by Age and Race Alaska Residents, 1994-1999



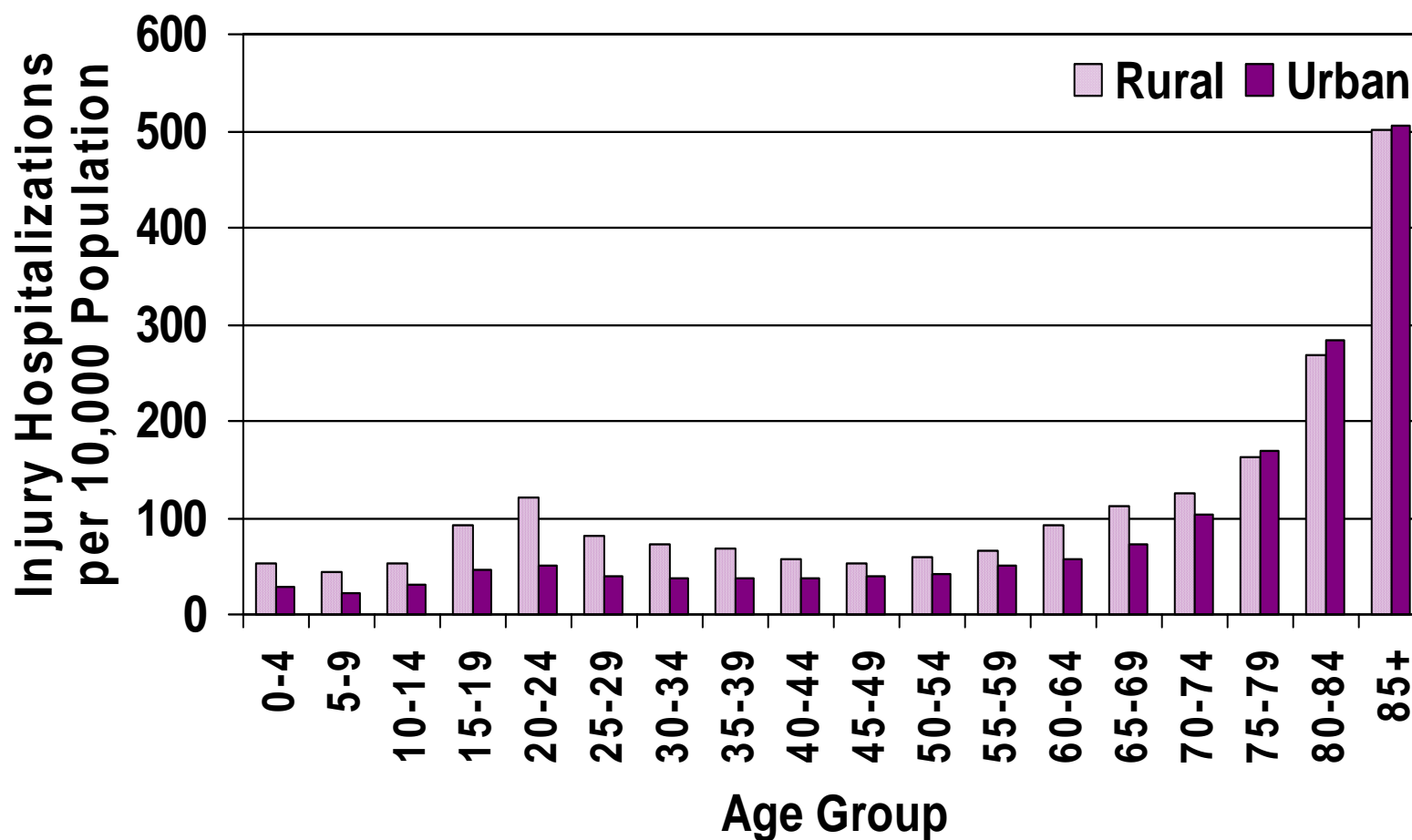
Unintentional Injury Hospitalization Rate by Age, Sex, and Race (Graph) Alaska Residents, 1994-1999



Unintentional Injury Hospitalization Rate by Age, Sex, and Race (Data Table) Alaska Residents, 1994-1999

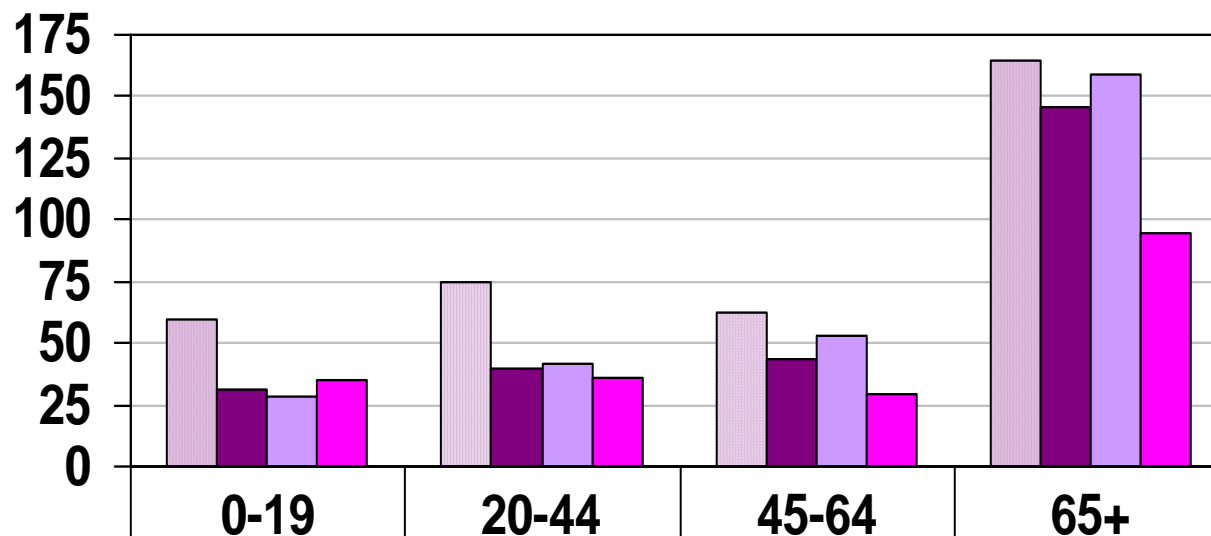
Sex	Age Group	Native		White		Rate Ratio (N:W)
		Count	Rate	Count	Rate	
Males						
	0-19	1319	94.8	1852	41.7	2.3
	20-44	1635	150.5	3448	58.1	2.6
	45-64	514	125.3	1606	49.2	2.5
	65+	250	188.4	742	108.3	1.7
Females						
	0-19	724	54.3	959	22.9	2.4
	20-44	803	74.7	1307	24.5	3.0
	45-64	428	98.3	890	33.4	2.9
	65+	447	258.2	1163	163.0	1.6





Unintentional Injury Hospitalization Rate by Region of Residence, 5-Year Age Groups Alaska Residents, 1994-1999



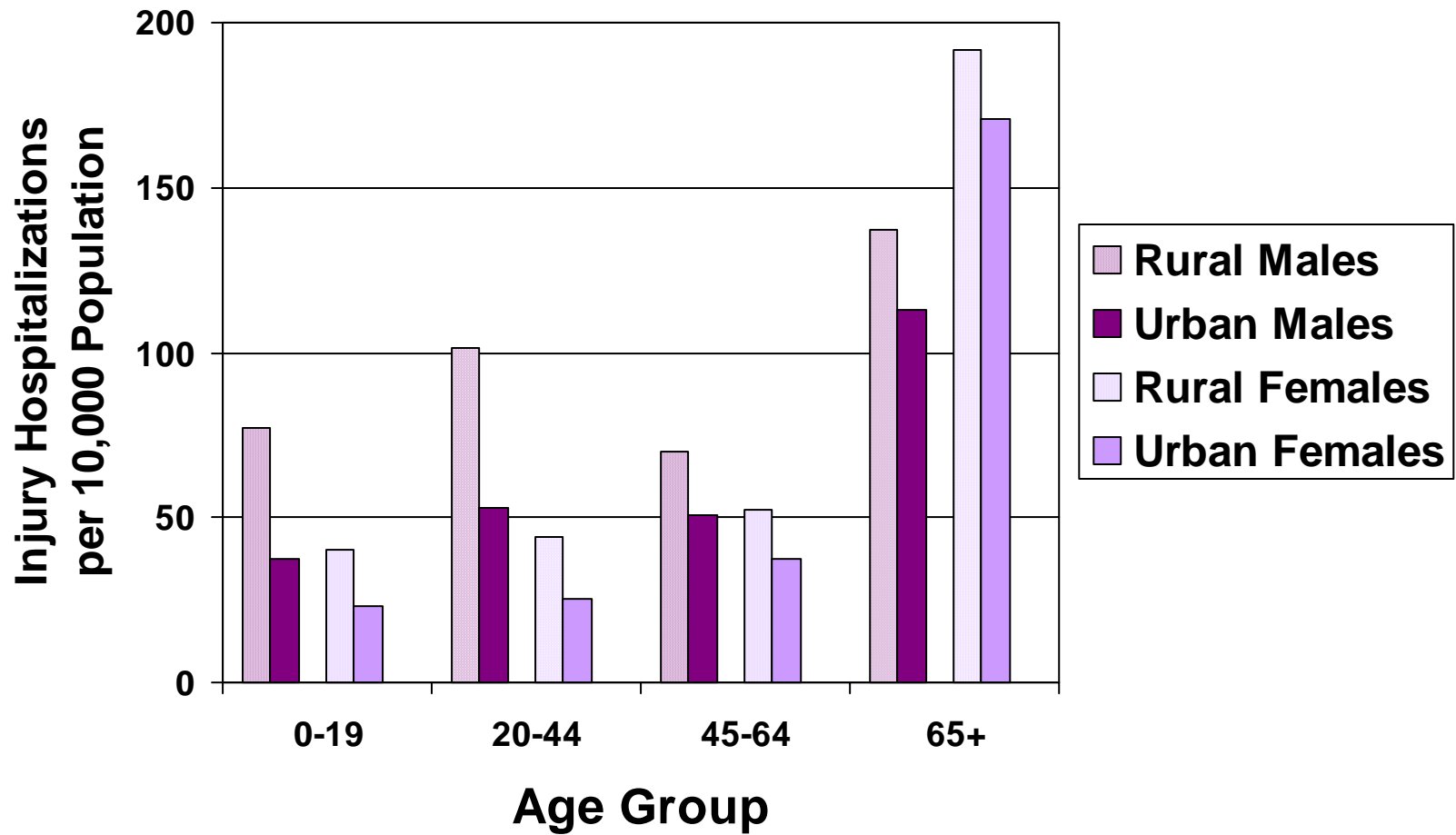
Unintentional Injury Hospitalization Rate by Age and Region of Residence Alaska Residents, 1994-1999

**Injury Hospitalizations
per 10,000 Population**



	0-19	20-44	45-64	65+
 Rural	59.2	74.4	62.1	164.8
 Anchorage	31.0	40.0	43.3	146.1
 Fairbanks	28.0	41.2	53.2	158.5
 Juneau	34.6	36.4	29.6	94.4

Unintentional Injury Hospitalization Rate by Age, Sex and Region of Residence (Graph) Alaska Residents, 1994-1999



Unintentional Injury Hospitalization Rate by Age, Sex and Region of Residence (Data Table) Alaska Residents, 1994-1999

Sex	Age Group	Rural		Urban		Rate Ratio (R:U)
		Count	Rate	Count	Rate	
Males						
	0-19	2086	77.2	1404	37.6	2.1
	20-44	2959	101.4	2622	53.1	1.9
	45-64	1159	70.1	1134	50.8	1.4
	65+	564	137.4	519	112.8	1.2
Females						
	0-19	1015	40.0	821	23.2	1.7
	20-44	1132	43.9	1158	25.6	1.7
	45-64	692	52.2	746	37.3	1.4
	65+	800	191.8	939	170.8	1.1

Summary: Unintentional Injury Hospitalization Rates

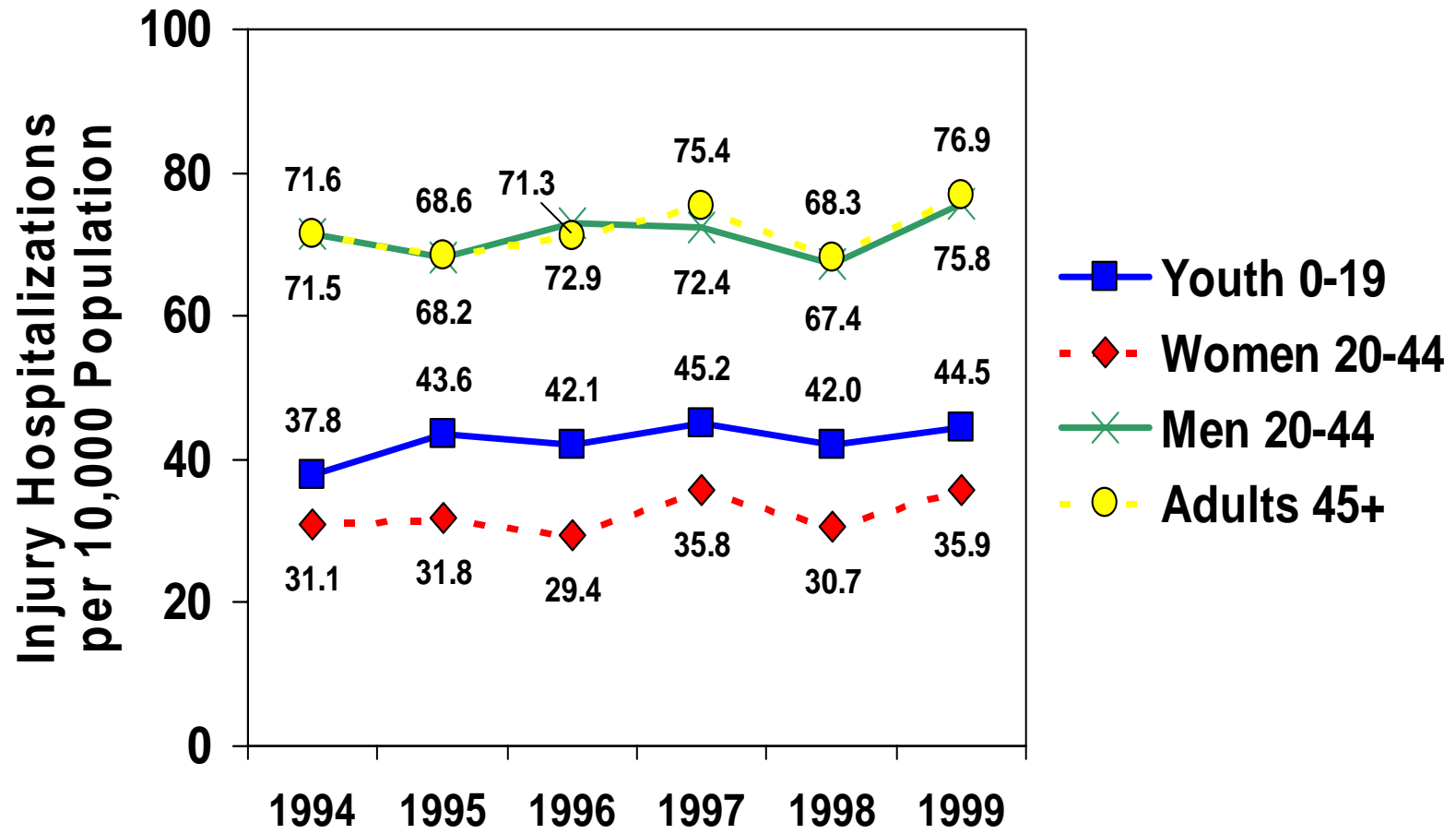
- ✓ Men are hospitalized for unintentional injuries at higher rates than same-aged women until age 70-74, at which point rates for women surpass rates for men.
- ✓ Until age 85, the rate of unintentional injury hospitalization is higher for Alaska Natives than for Whites.
 - ✓ Among youth (0-19), Alaska Natives are hospitalized for unintentional injuries at twice the rate of Whites.
 - ✓ Among women 20-44, Alaska Natives are hospitalized for unintentional injuries at three times the rate of Whites.
- ✓ Until age 75, the rate of unintentional injury hospitalization for rural residents is higher than the rate for residents of Anchorage, Fairbanks, and Juneau.

Trends in Disparities among Unintentional Injury Hospitalization Rates

Alaska 1994-1999

Age-Specific Rates, Rate Ratios
and Rate Differences across 6 Years
with focus on Youth (0-19), Women and Men 20-44,
and Older Adults (45 and older)

Trends in Unintentional Injury Hospitalization Rates for Selected Groups: Alaska Residents, 1994-1999



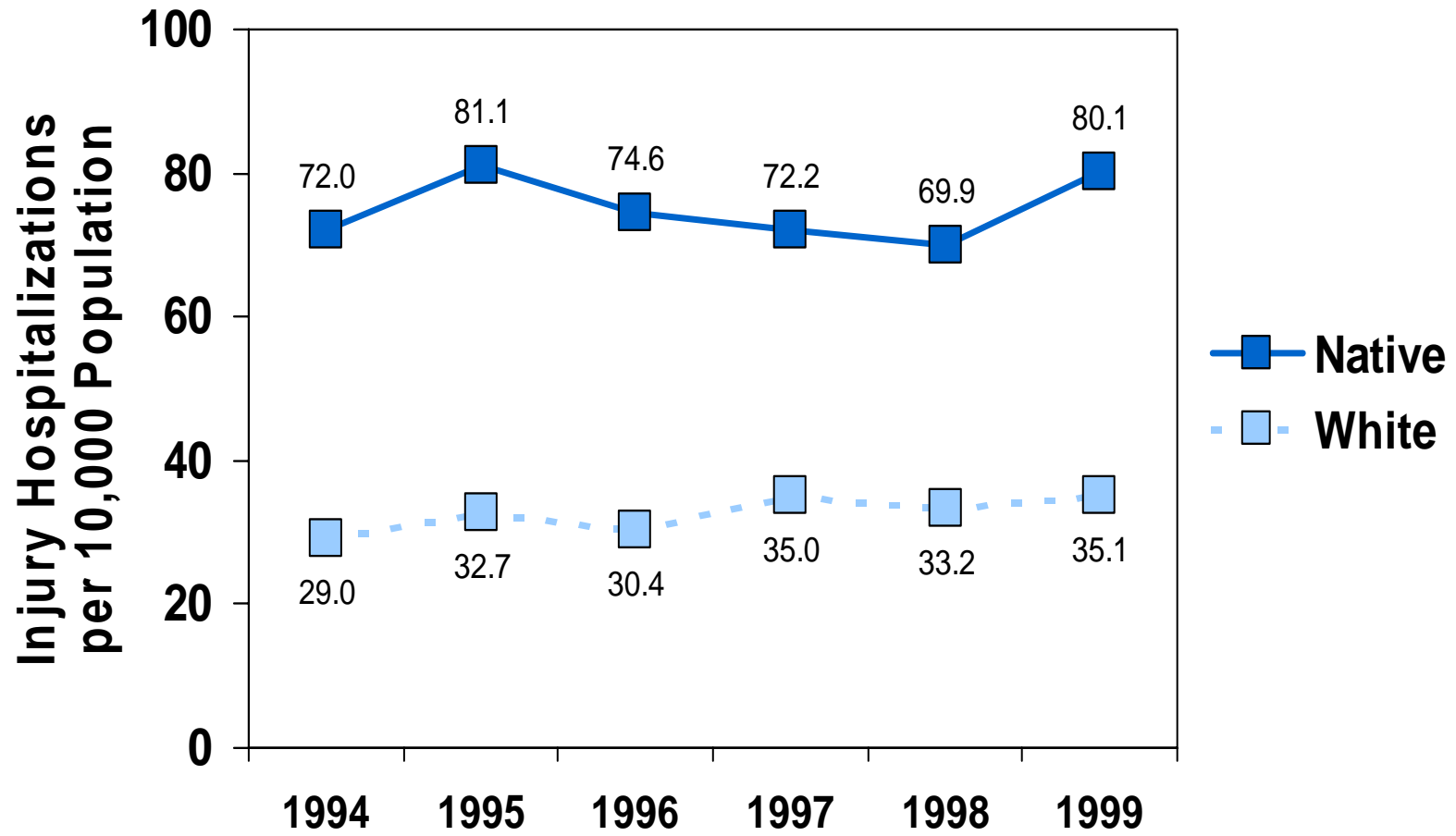
Source: DHSS/CHEMS, AK Trauma
Registry

Trends in Unintentional Injury Hospitalizations and Hospitalization Rates for Selected Groups: Alaska Residents, 1994-1999

Years	Total	Youth 0-19	Women 20-44	Men 20-44	Adults 45+
Hospitalizations					
1994	3101	780	382	984	955
1995	3160	902	382	914	962
1996	3233	872	350	960	1051
1997	3460	945	419	933	1163
1998	3212	888	355	857	1112
1999	3618	942	409	947	1320
Hospitalization Rates					
1994	51.63	37.8	31.1	71.5	71.6
1995	52.53	43.6	31.8	68.2	68.6
1996	53.42	42.1	29.4	72.9	71.3
1997	56.75	45.2	35.8	72.4	75.4
1998	52.05	42.0	30.7	67.4	68.3
1999	58.17	44.5	35.9	75.8	76.9

Source: DHSS/CHEMS, AK Trauma
Registry

Trends in Unintentional Injury Hospitalization Rates: Racial Disparities among *Youth 0-19* Alaska Residents, 1994-1999



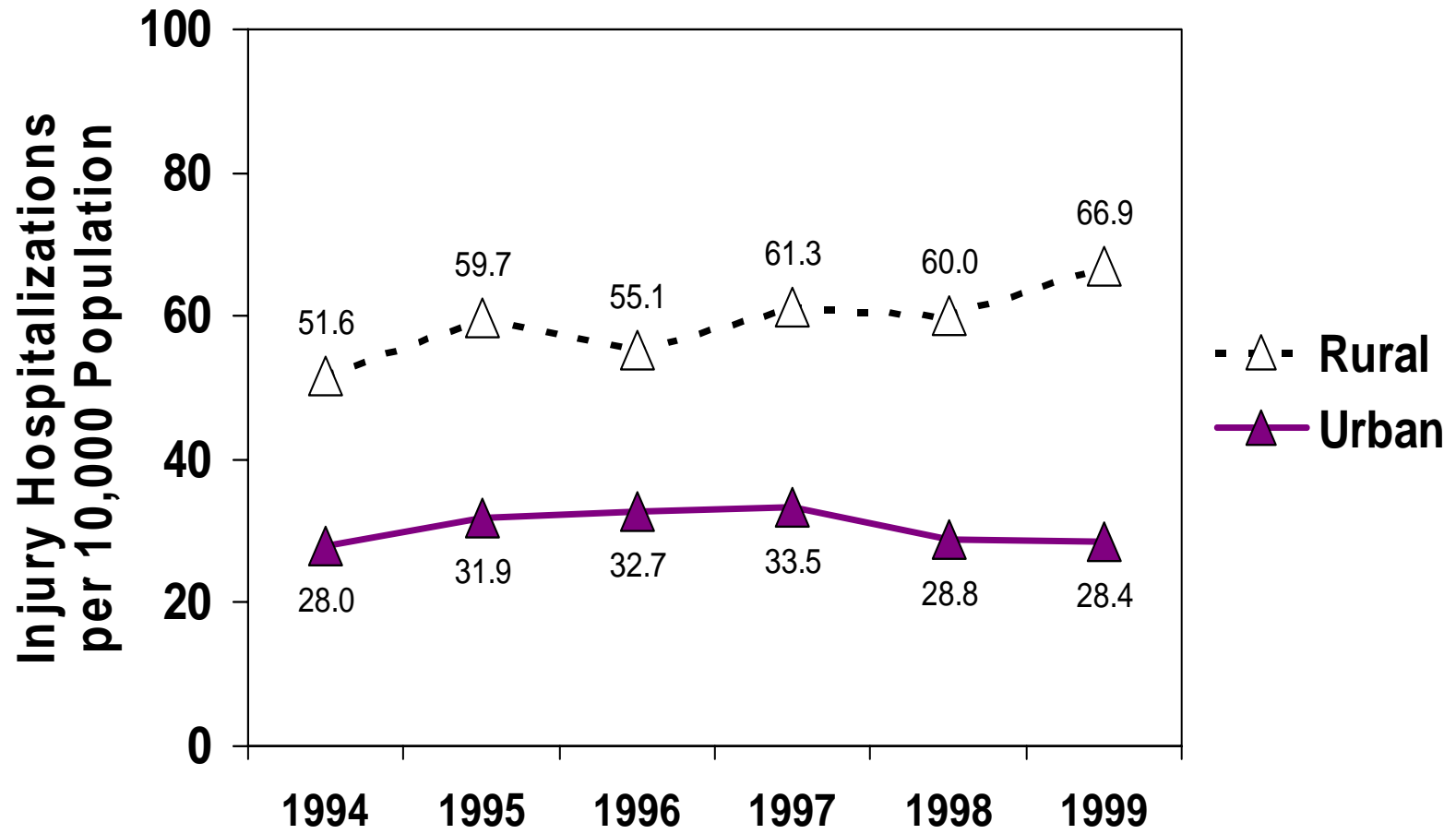
Source: DHSS/CHEMS, AK Trauma
Registry

Unintentional Injury Hospitalizations and Hospitalization Rates

by Race and Year, Native:White Rate Ratios and
Native-White Rate Differences: ***Youth 0-19, 1994-1999***

Year	Native Rate	Native Hospitalizations	White Rate	White Hospitalizations	Rate Ratio (N:W)	Rate Difference (N-W)
1994	72.0	313	29.0	419	2.5	43.0
1995	81.1	359	32.7	470	2.5	48.4
1996	74.6	336	30.4	434	2.5	44.2
1997	72.2	332	35.0	503	2.1	37.2
1998	69.9	326	33.2	480	2.1	36.7
1999	80.1	377	35.1	505	2.3	45.1

Trends in Unintentional Injury Hospitalization Rates: Regional Disparities among **Youth 0-19** Alaska Residents, 1994-1999



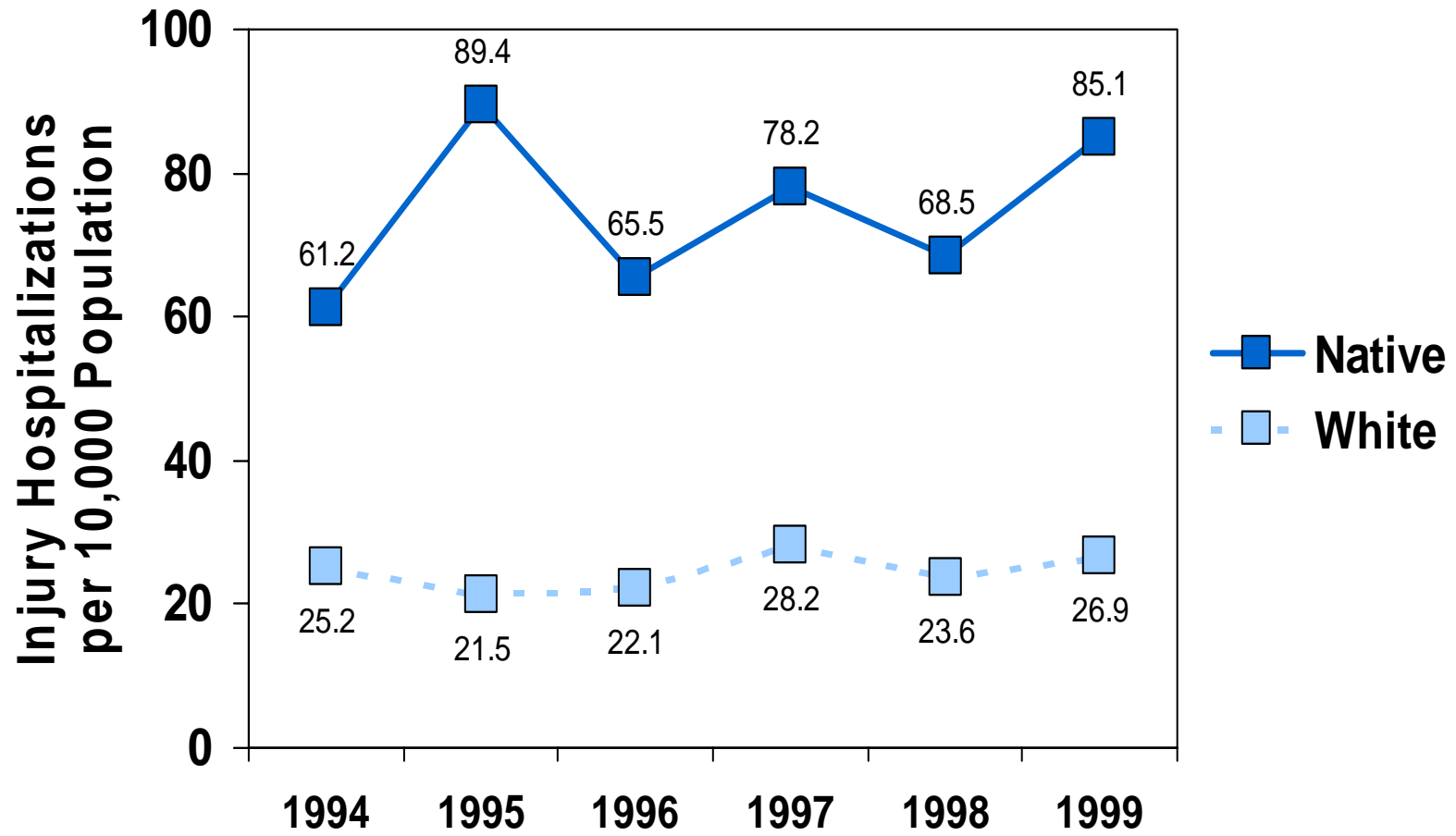
Source: DHSS/CHEMS, AK Trauma
Registry

Unintentional Injury Hospitalizations and Hospitalization Rates

by Region and Year, Rural:Urban Rate Ratios and Rural-Urban Rate Differences: ***Youth 0-19***, 1994-1999

Year	Rural Rate	Rural Hospitalizations	Urban Rate	Urban Hospitalizations	Rate Ratio (R:U)	Rate Difference (R-U)
1994	51.6	441	28.0	339	1.8	23.6
1995	59.7	518	31.9	384	1.9	27.8
1996	55.1	478	32.7	394	1.7	22.4
1997	61.3	539	33.5	406	1.8	27.8
1998	60.0	534	28.8	352	2.1	31.3
1999	66.9	591	28.4	350	2.4	38.5

Trends in Unintentional Injury Hospitalization Rates: Racial Disparities among **Women 20-44** Alaska Residents, 1994-1999

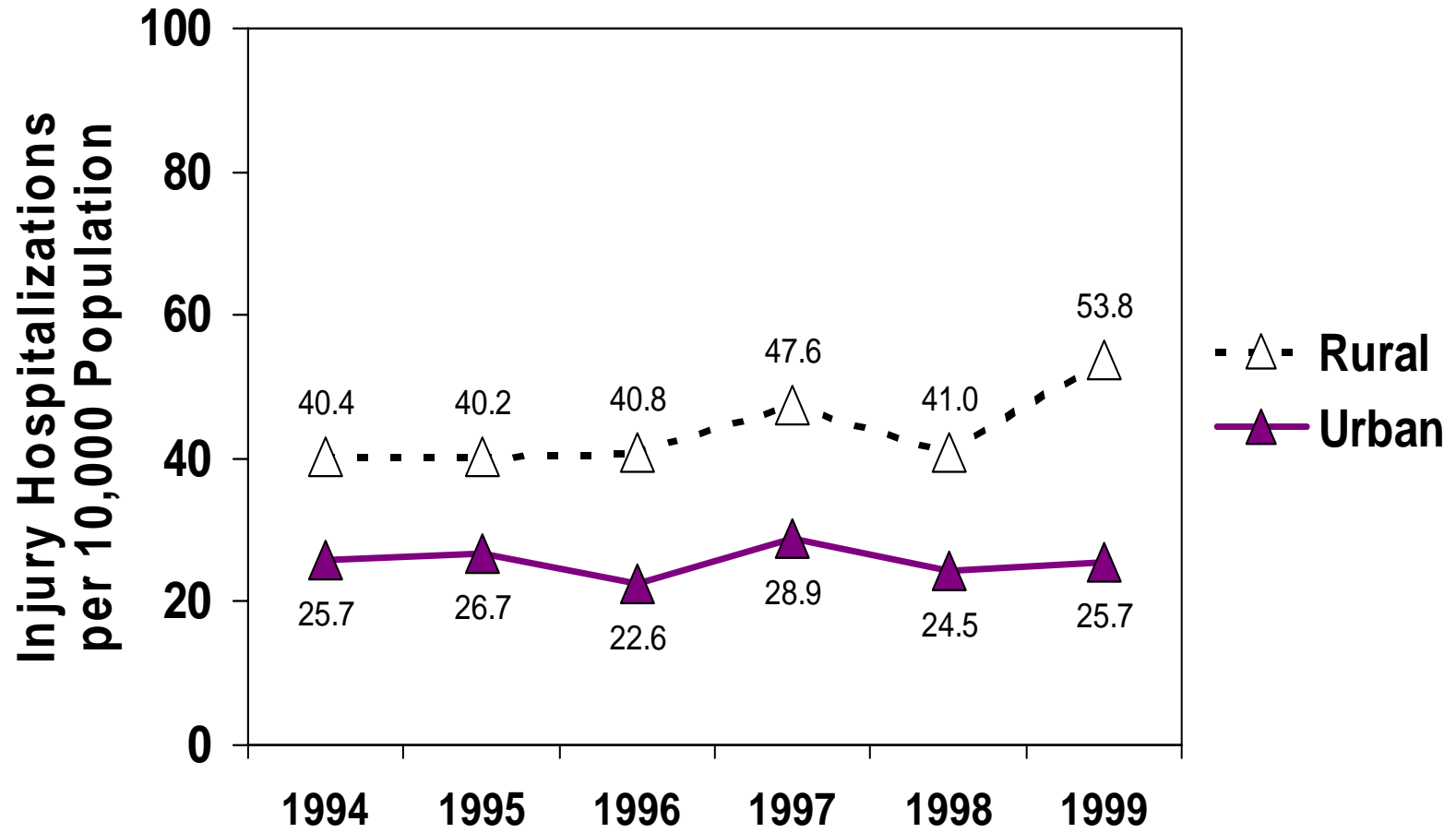


Source: DHSS/CHEMS, AK Trauma
Registry

Unintentional Injury Hospitalizations and Hospitalization Rates by Race and Year, Native:White Rate Ratios and Native-White Rate Differences: ***Women 20-44***, 1994-1999

Year	Native Rate	Native Hospitalizations	White Rate	White Hospitalizations	Rate Ratio (N:W)	Rate Difference (N-W)
1994	61.2	108	25.2	237	2.4	36.0
1995	89.4	159	21.5	196	4.2	67.9
1996	65.5	117	22.1	198	3.0	43.4
1997	78.2	141	28.2	247	2.8	50.0
1998	68.5	124	23.6	203	2.9	44.9
1999	85.1	154	26.9	226	3.2	58.2

Trends in Unintentional Injury Hospitalization Rates: Regional Disparities among **Women 20-44** Alaska Residents, 1994-1999

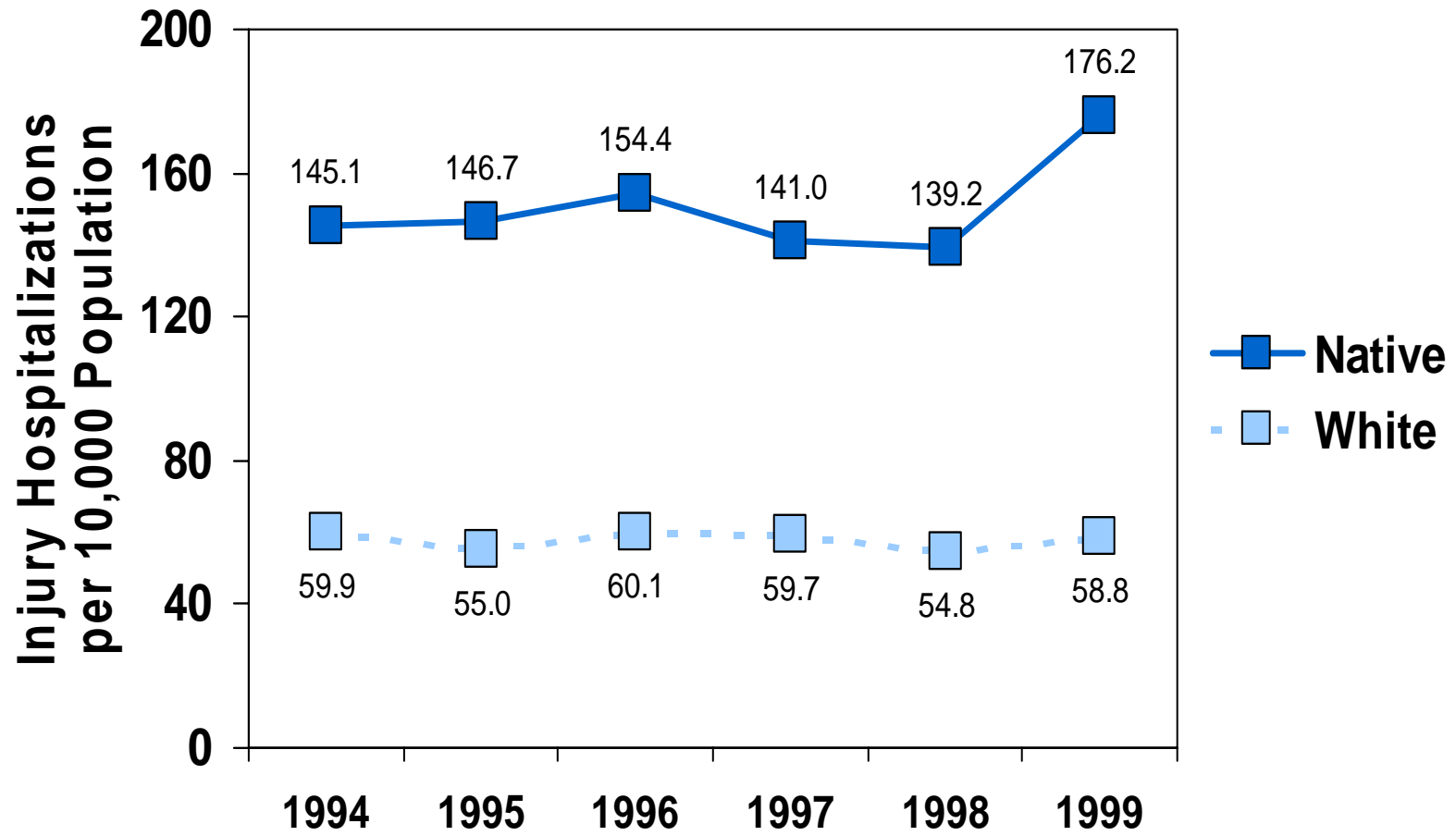


Source: DHSS/CHEMS, AK Trauma
Registry

Unintentional Injury Hospitalizations and Hospitalization Rates by Region and Year, Rural:Urban Rate Ratios and Rural-Urban Rate Differences: ***Women 20-44***, 1994-1999

Year	Rural Rate	Rural Hospitalizations	Urban Rate	Urban Hospitalizations	Rate Ratio (R:U)	Rate Difference (R-U)
1994	40.4	179	25.7	202	1.6	14.7
1995	40.2	177	26.7	204	1.5	13.5
1996	40.8	177	22.6	171	1.8	18.2
1997	47.6	203	28.9	215	1.6	18.7
1998	41.0	173	24.5	180	1.7	16.5
1999	53.8	223	25.7	186	2.1	28.1

Trends in Unintentional Injury Hospitalization Rates: Racial Disparities among **Men 20-44** Alaska Residents, 1994-1999

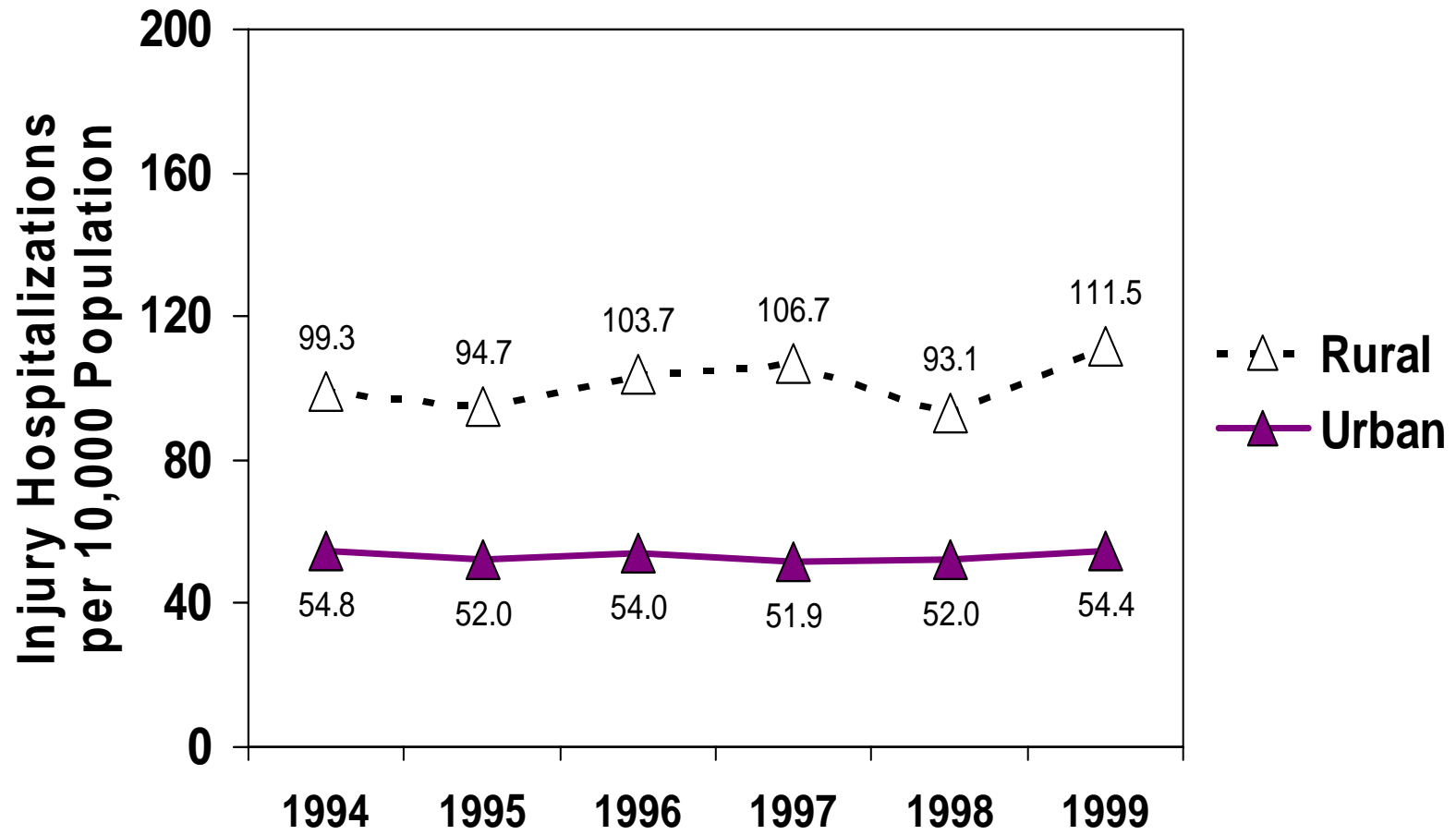


Source: DHSS/CHEMS, AK Trauma
Registry

Unintentional Injury Hospitalizations and Hospitalization Rates by Race and Year, Native:White Rate Ratios and Native-White Rate Differences: ***Men 20-44***, 1994-1999

Year	Native Rate	Native Hospitalizations	White Rate	White Hospitalizations	Rate Ratio (N:W)	Rate Difference (N-W)
1994	145.1	258	59.9	639	2.4	85.2
1995	146.7	263	55.0	566	2.7	91.6
1996	154.4	278	60.1	602	2.6	94.3
1997	141.0	257	59.7	579	2.4	81.3
1998	139.2	255	54.8	519	2.5	84.4
1999	176.2	324	58.8	543	3.0	117.4

Trends in Unintentional Injury Hospitalization Rates: Regional Disparities among ***Men 20-44*** Alaska Residents, 1994-1999

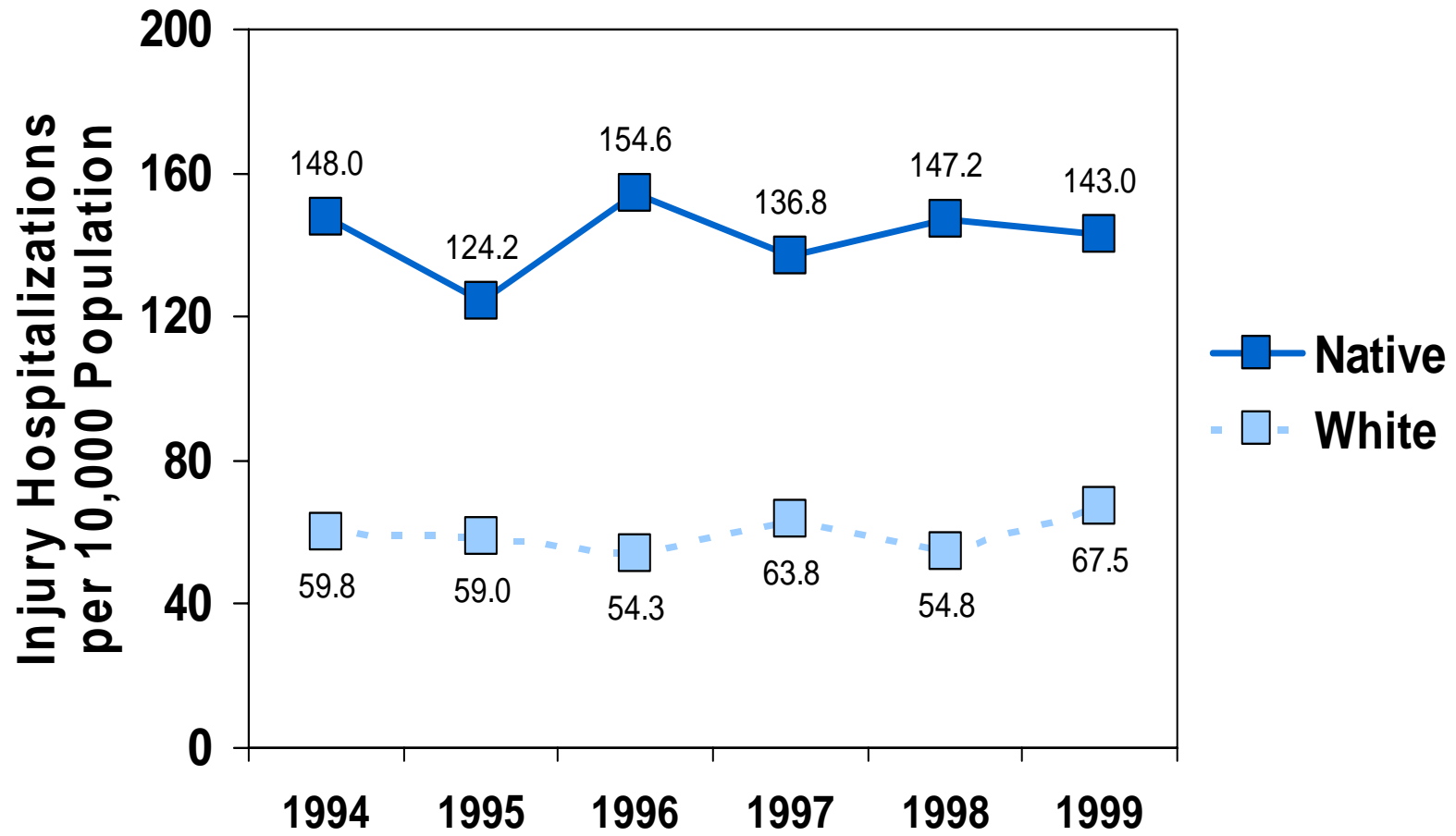


Source: DHSS/CHEMS, AK Trauma
Registry

Unintentional Injury Hospitalizations and Hospitalization Rates by Region and Year, Rural:Urban Rate Ratios and Rural-Urban Rate Differences: ***Men 20-44***, 1994-1999

Year	Rural Rate	Rural Hospitalizations	Urban Rate	Urban Hospitalizations	Rate Ratio (R:U)	Rate Difference (R-U)
1994	99.3	507	54.8	475	1.8	44.5
1995	94.7	471	52.0	439	1.8	42.7
1996	103.7	508	54.0	447	1.9	49.7
1997	106.7	512	51.9	420	2.1	54.8
1998	93.1	441	52.0	415	1.8	41.0
1999	111.5	520	54.4	426	2.1	57.2

Trends in Unintentional Injury Hospitalization Rates: Racial Disparities among **Adults 45+** Alaska Residents, 1994-1999

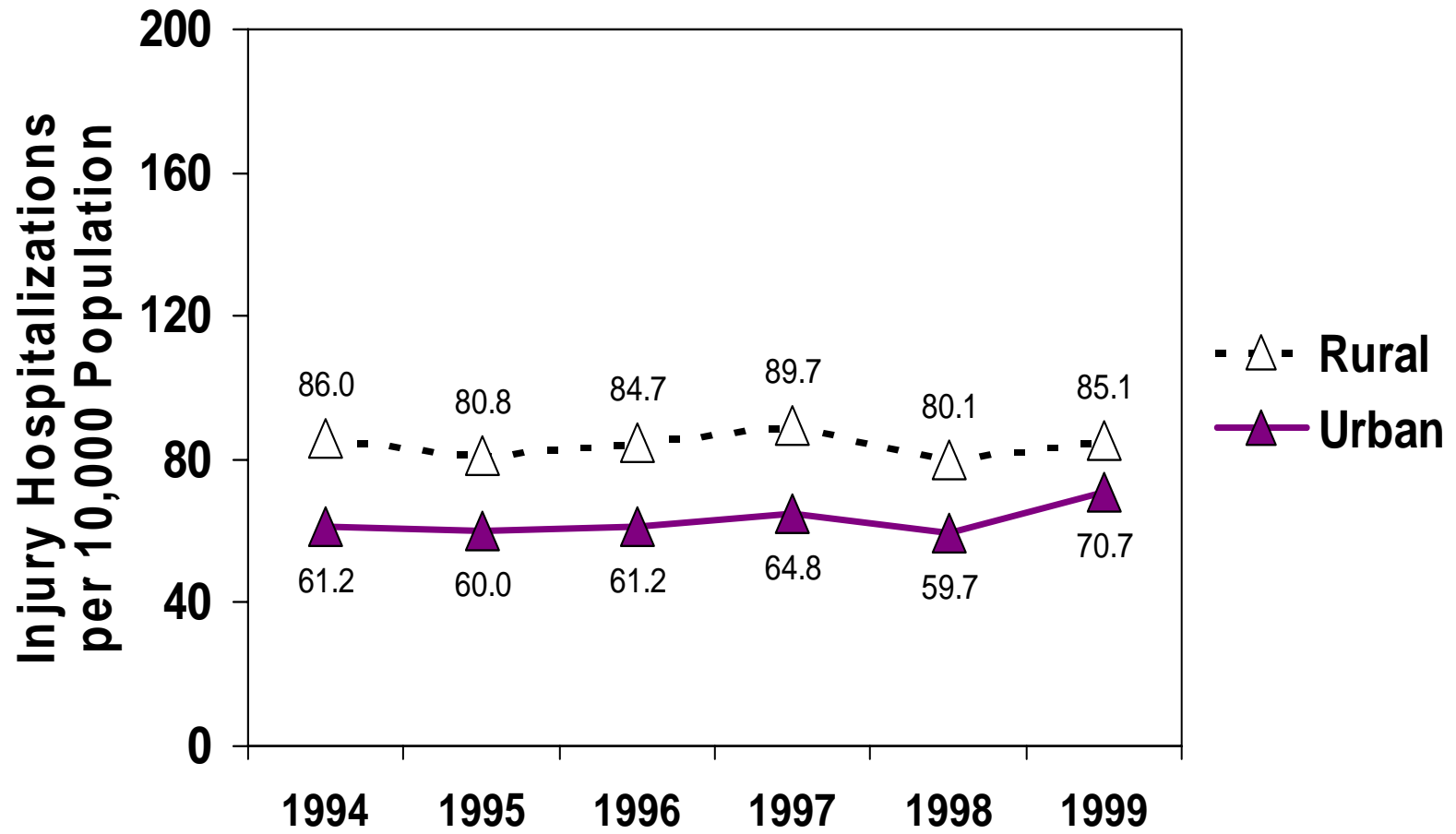


Source: DHSS/CHEMS, AK Trauma
Registry

Unintentional Injury Hospitalizations and Hospitalization Rates by Race and Year, Native:White Rate Ratios and Native-White Rate Differences: ***Men & Women 45+, 1994-1999***

Year	Native Rate	Native Hospitalizations	White Rate	White Hospitalizations	Rate Ratio (N:W)	Rate Difference (N-W)
1994	148.0	256	59.8	644	2.5	88.2
1995	124.2	224	59.0	668	2.1	65.1
1996	154.6	290	54.3	646	2.8	100.3
1997	136.8	267	63.8	792	2.1	73.0
1998	147.2	299	54.8	718	2.7	92.4
1999	143.0	303	67.5	933	2.1	75.4

Trends in Unintentional Injury Hospitalization Rates: Regional Disparities among **Adults 45+** Alaska Residents, 1994-1999



Source: DHSS/CHEMS, AK Trauma
Registry

Unintentional Injury Hospitalizations and Hospitalization Rates by Region and Year, Rural:Urban Rate Ratios and Rural-Urban Rate Differences: ***Men & Women 45+, 1994-1999***

Year	Rural Rate	Rural Hospitalizations	Urban Rate	Urban Hospitalizations	Rate Ratio (R:U)	Rate Difference (R-U)
1994	86.0	481	61.2	474	1.4	24.7
1995	80.8	470	60.0	492	1.3	20.9
1996	84.7	524	61.2	524	1.4	23.6
1997	89.7	579	64.8	581	1.4	25.0
1998	80.1	546	59.7	565	1.3	20.4
1999	85.1	615	70.7	702	1.2	14.4

Summary: Trends in Unintentional Injury Disparities

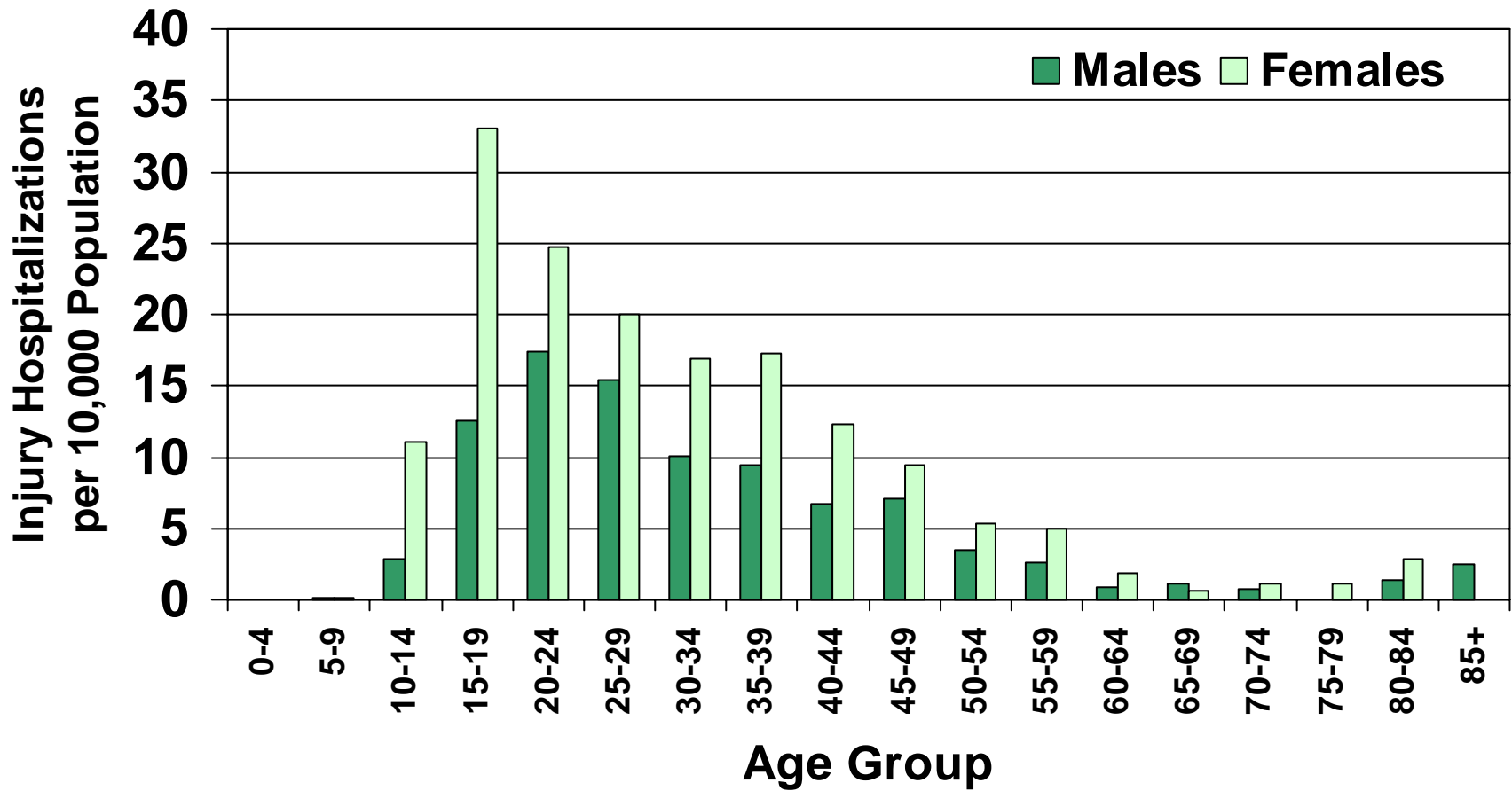
- ✓ Trends in injury hospitalization rates reported herein may reflect improvements in Trauma Registry methodology and completeness and improvements in access to trauma care, in addition to changes in the underlying injury rates.
- ✓ Unintentional injury hospitalization rates have risen slightly among all 4 age-sex groups.
- ✓ Racial disparities have persisted in all groups and have increased slightly among men 20-44.
- ✓ Regional disparities, have persisted or increased slightly among those under 45.

Suicide Attempt Hospitalization Rates

Alaska, 1994-1999

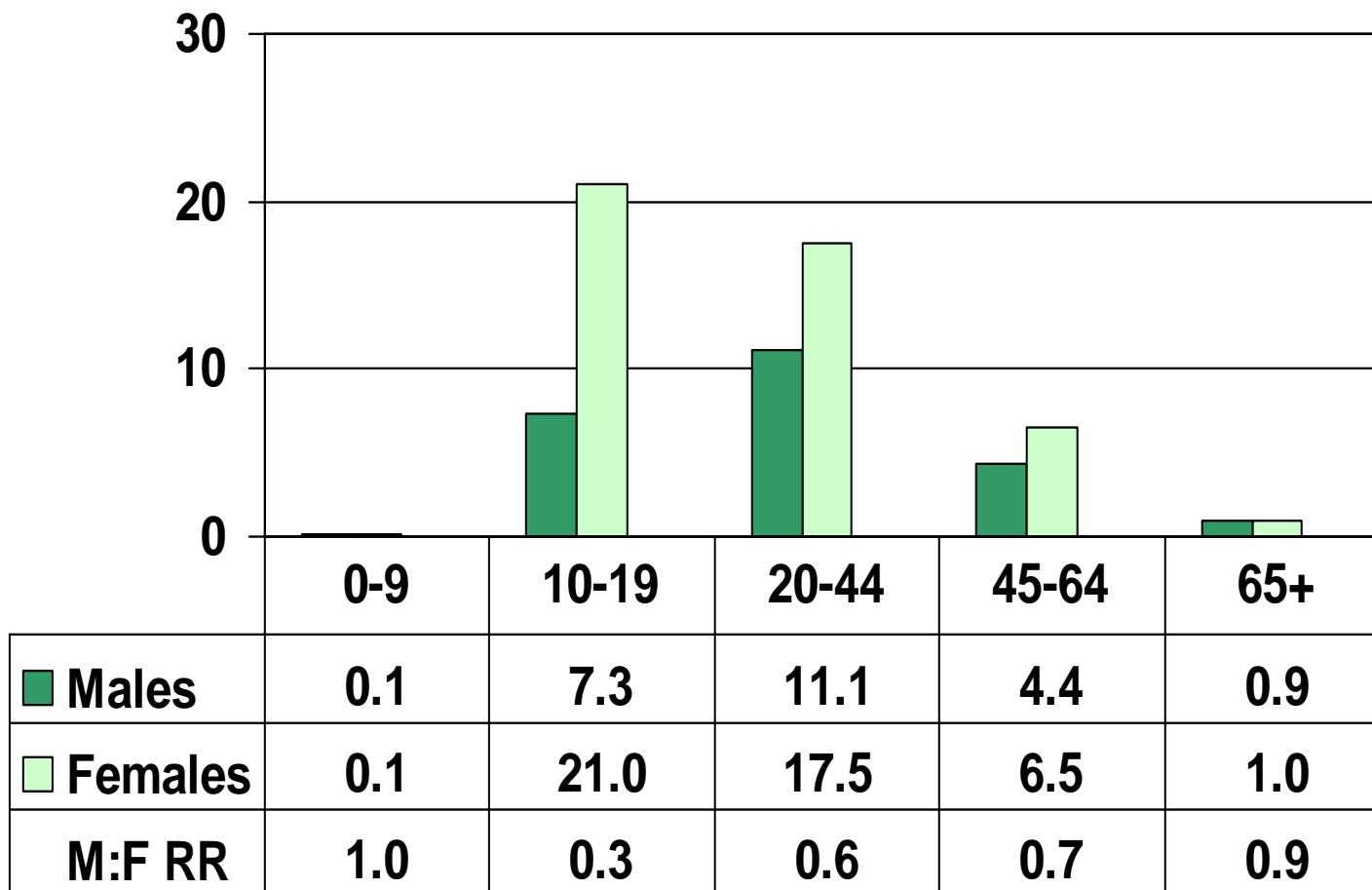
Age-Specific Rates of Fatal and Nonfatal Suicide
Attempts by Sex, Race, and Region

Suicide Attempt Hospitalization Rates by Sex, 5-Year Age Groups, Alaska Residents, 1994-1999

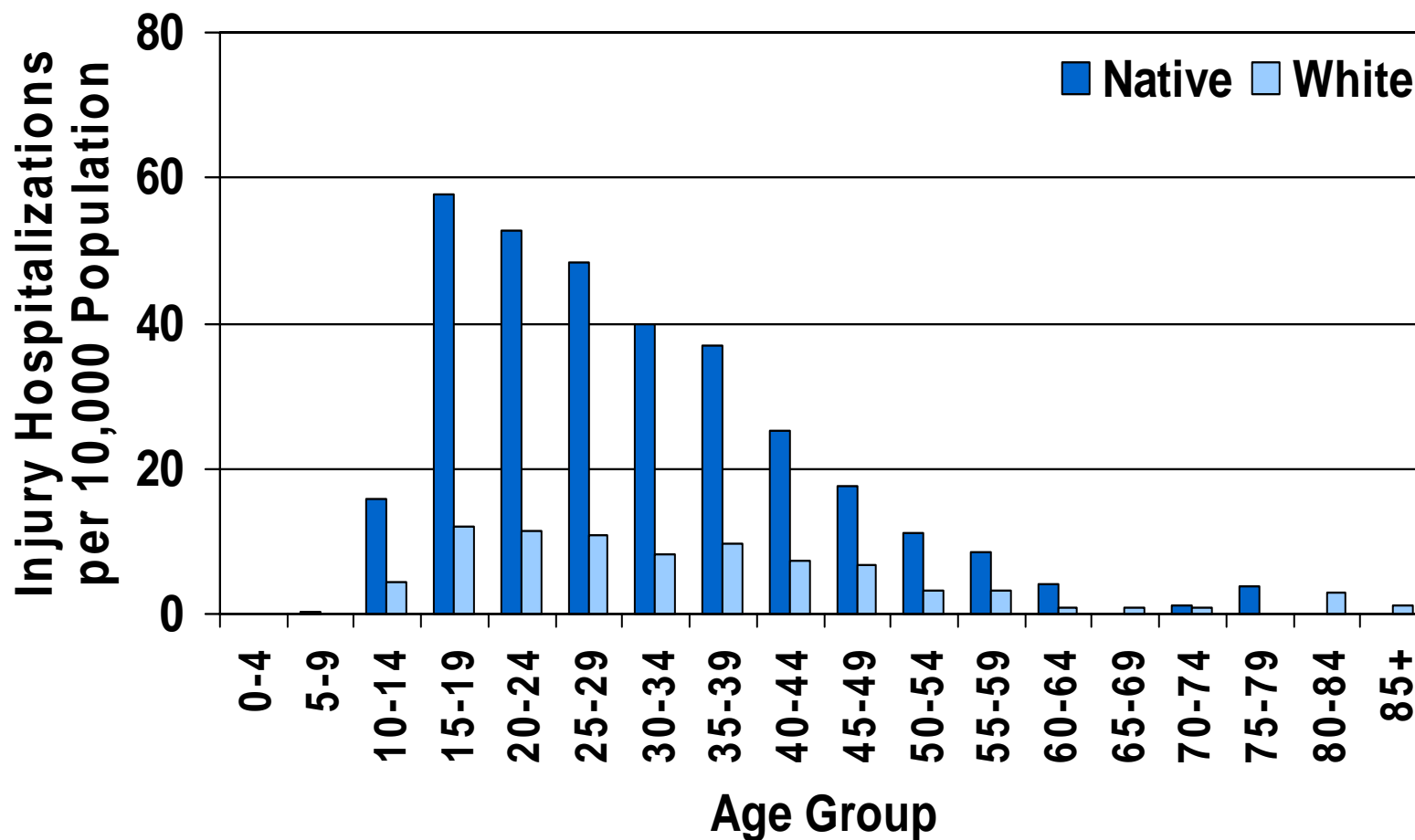


Suicide Attempt Hospitalization Rate by Age and Sex Alaska Residents, 1994-1999

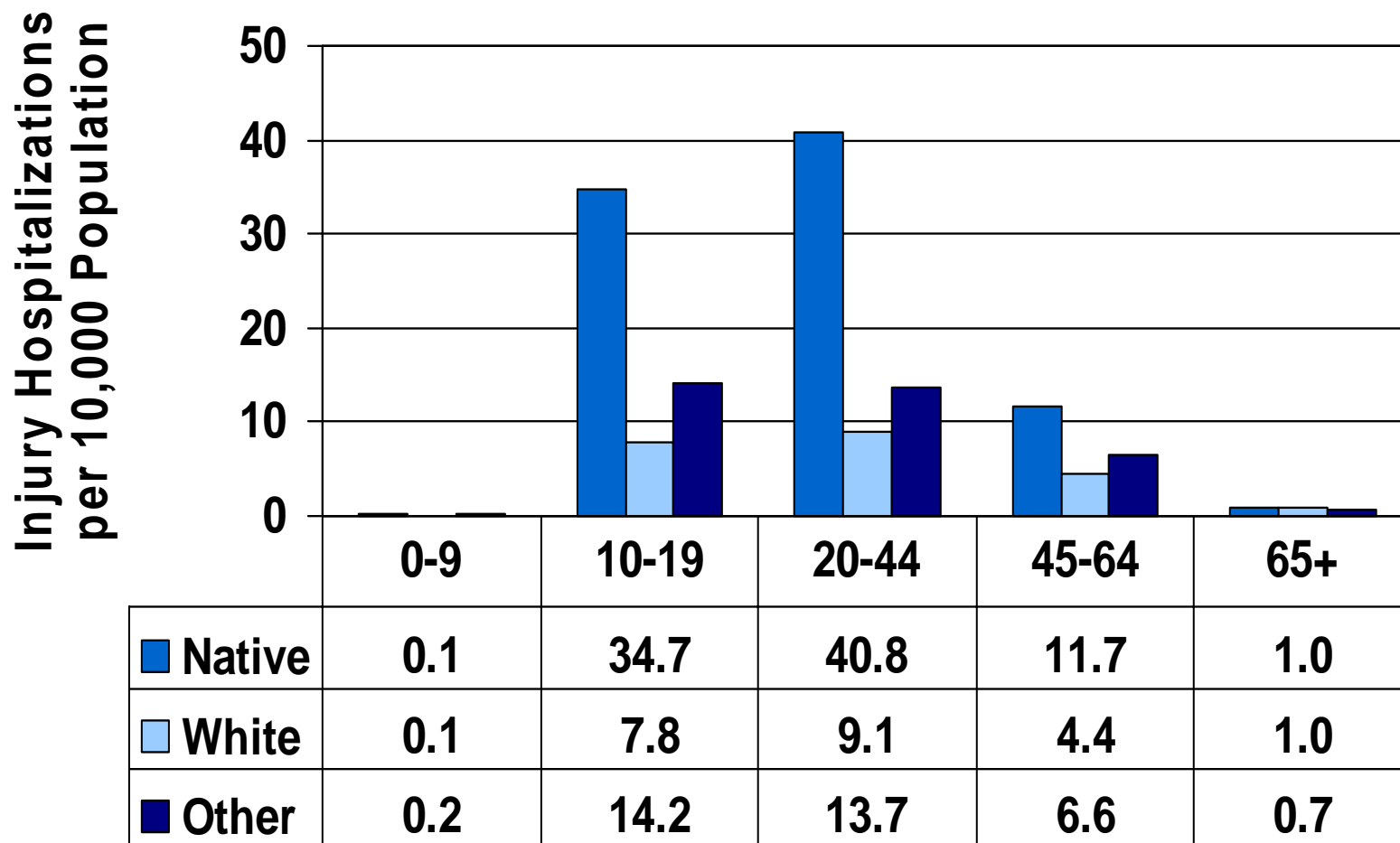
**Injury Hospitalizations
per 10,000 Population**



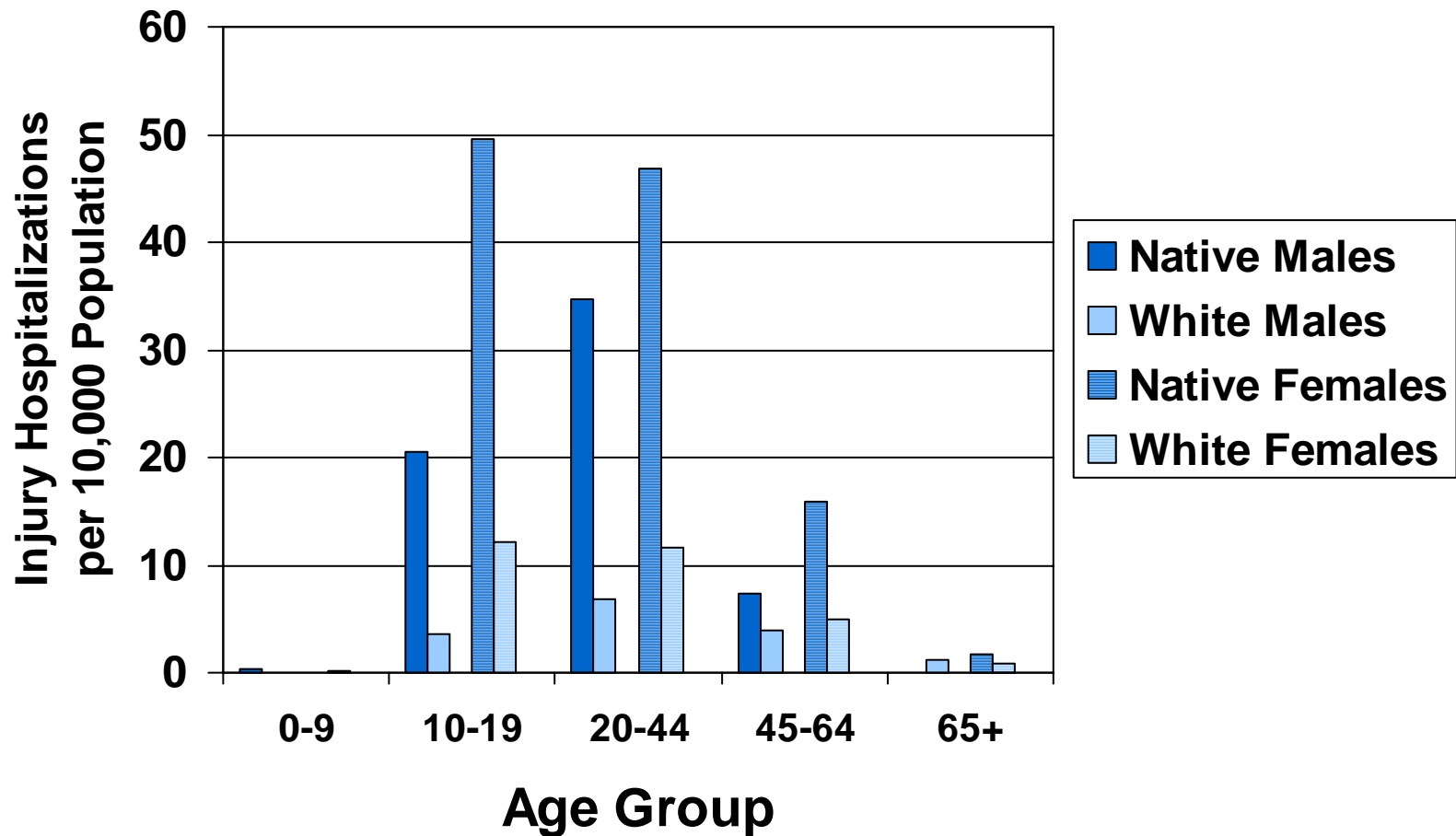
Suicide Attempt Hospitalization Rate by Race, 5-year Age Groups, Alaska Residents, 1994-1999



Suicide Attempt Hospitalization Rate by Age and Race Alaska Residents, 1994-1999



Suicide Attempt Hospitalization Rate by Age, Sex, and Race (Graph) Alaska Residents, 1994-1999



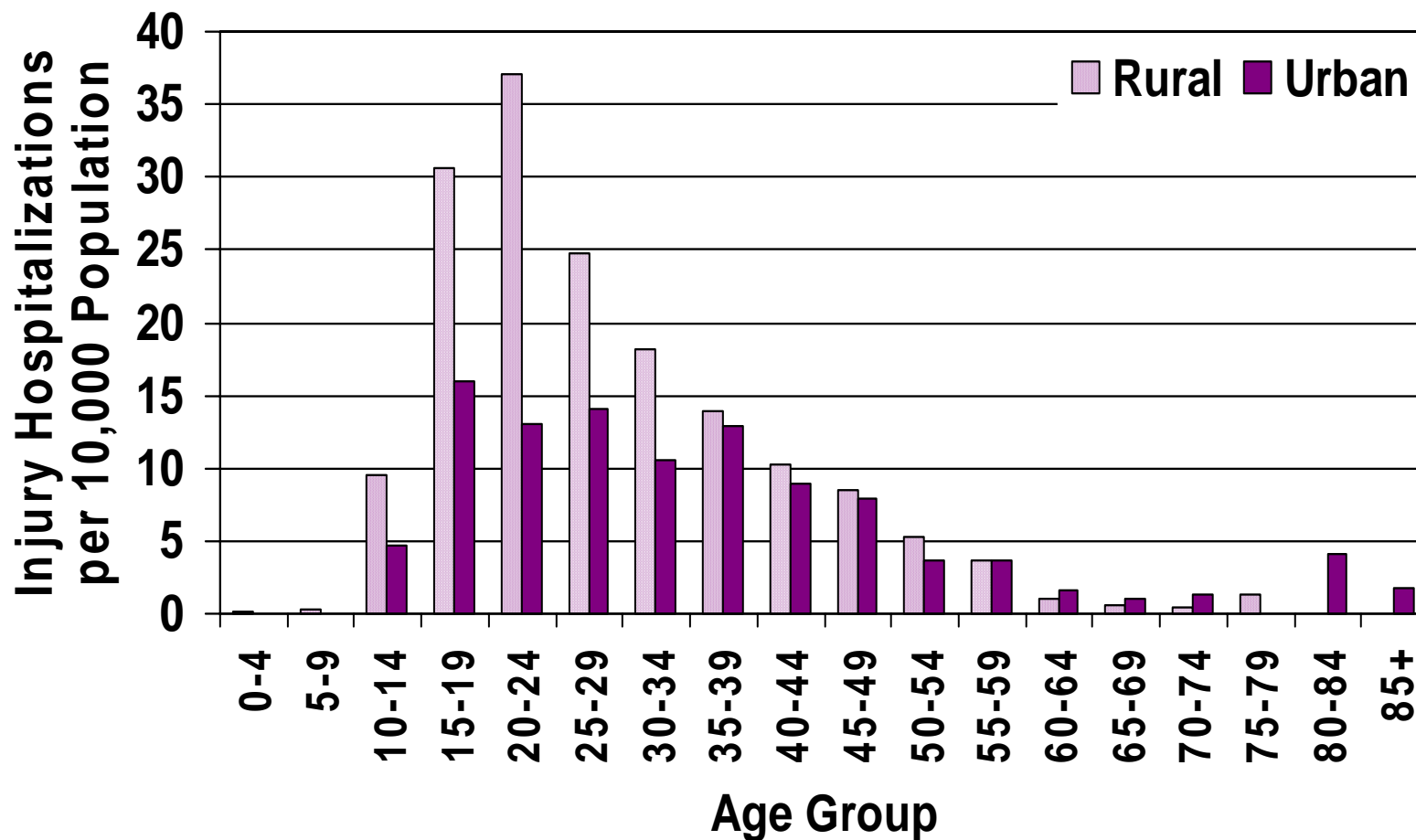
Source: DHSS/CHEMS, AK Trauma
Registry

Suicide Attempt Hospitalization Rate by Age, Sex, and Race (Data Table) Alaska Residents, 1994-1999

Sex	Age Group	Native		White		Rate Ratio (N:W)
		Count	Rate	Count	Rate	
Males						
	0-9	2	0.3	1	0.0	6.5
	10-19	129	20.5	78	3.6	5.7
	20-44	377	34.7	402	6.8	5.1
	45-64	30	7.3	130	4.0	1.8
	65+	0	0.0	8	1.2	
Females						
	0-9	0	0.0	2	0.1	
	10-19	297	49.5	246	12.2	4.1
	20-44	504	46.9	619	11.6	4.0
	45-64	69	15.9	131	4.9	3.2
	65+	3	1.7	6	0.8	2.1

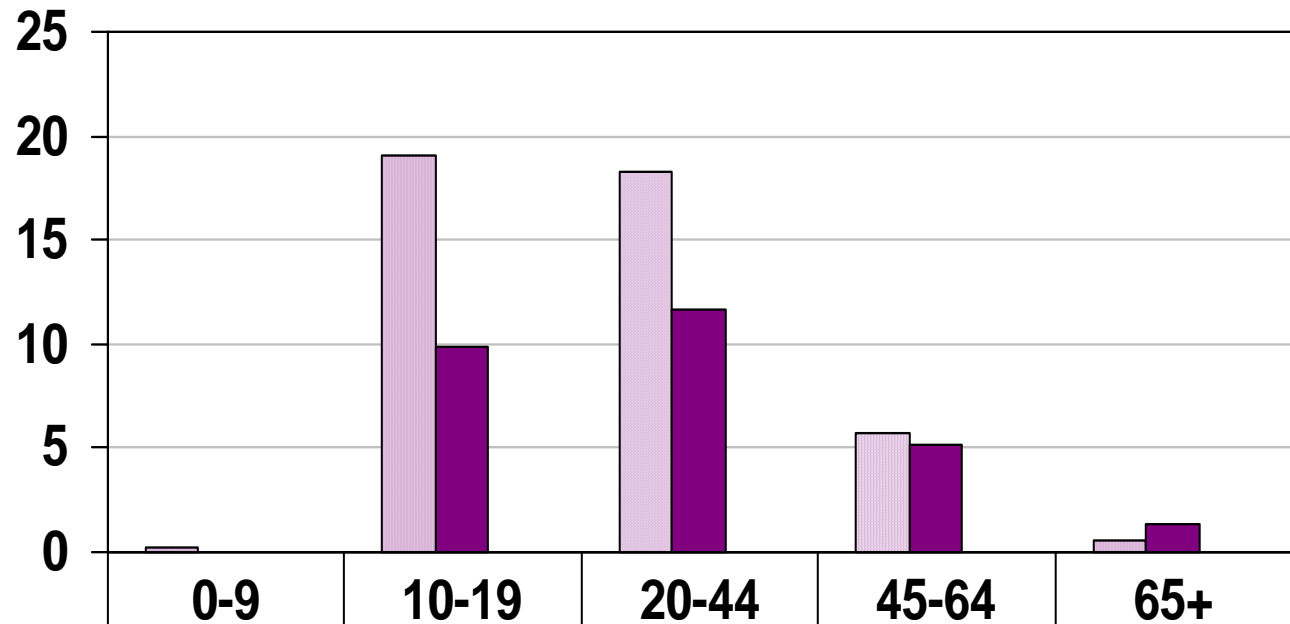
Source: DHSS/CHEMS, AK Trauma
Registry

Suicide Attempt Hospitalization Rate by Region of Residence, 5-Year Age Groups Alaska Residents, 1994-1999



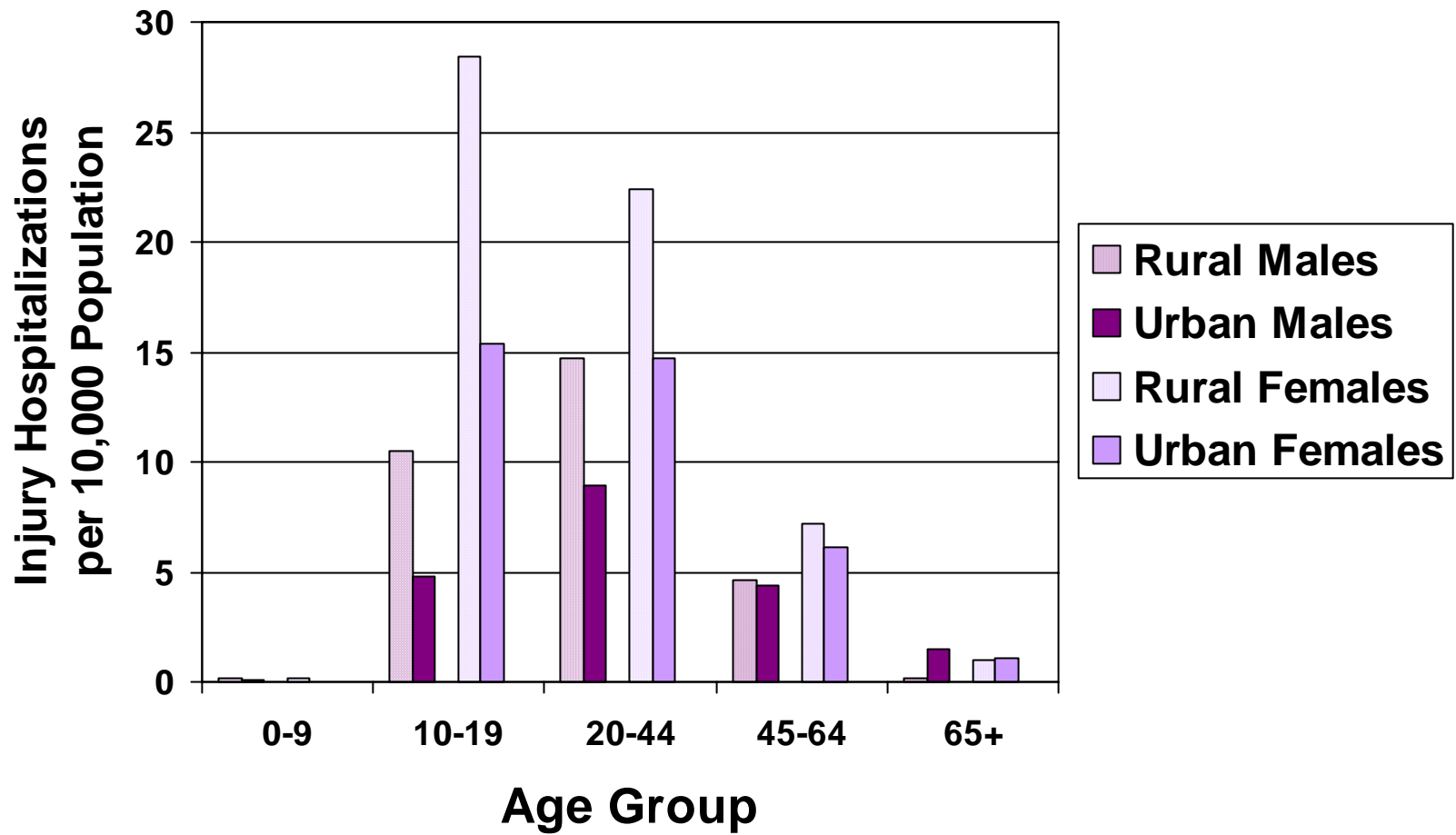
Suicide Attempt Hospitalization Rate by Age and Region of Residence Alaska Residents, 1994-1999

**Injury Hospitalizations
per 10,000 Population**



	0-9	10-19	20-44	45-64	65+
 Rural	0.2	19.1	18.3	5.7	0.6
 Urban	0	9.9	11.7	5.2	1.3
R:U RR	--	1.9	1.6	1.1	0.5

Suicide Attempt Hospitalization Rate by Age, Sex and Region of Residence (Graph) Alaska Residents, 1994-1999



Source: DHSS/CHEMS, AK Trauma
Registry

Suicide Attempt Hospitalization Rate by Age, Sex and Region of Residence (Data Table) Alaska Residents, 1994-1999

Sex	Age Group	Rural		Urban		Rate Ratio (R:U)
		Count	Rate	Count	Rate	
Males						
	0-9	2	0.2	1	0.1	3.0
	10-19	141	10.5	83	4.8	2.2
	20-44	428	14.7	440	8.9	1.6
	45-64	76	4.6	97	4.4	1.1
	65+	1	0.2	7	1.5	0.2
Females						
	0-9	3	0.2	0	0.0	
	10-19	353	28.4	248	15.4	1.8
	20-44	577	22.4	664	14.7	1.5
	45-64	95	7.2	123	6.1	1.2
	65+	4	1.0	6	1.1	0.9

Source: DHSS/CHEMS, AK Trauma
Registry

Summary: Suicide Attempt Hospitalization Rates

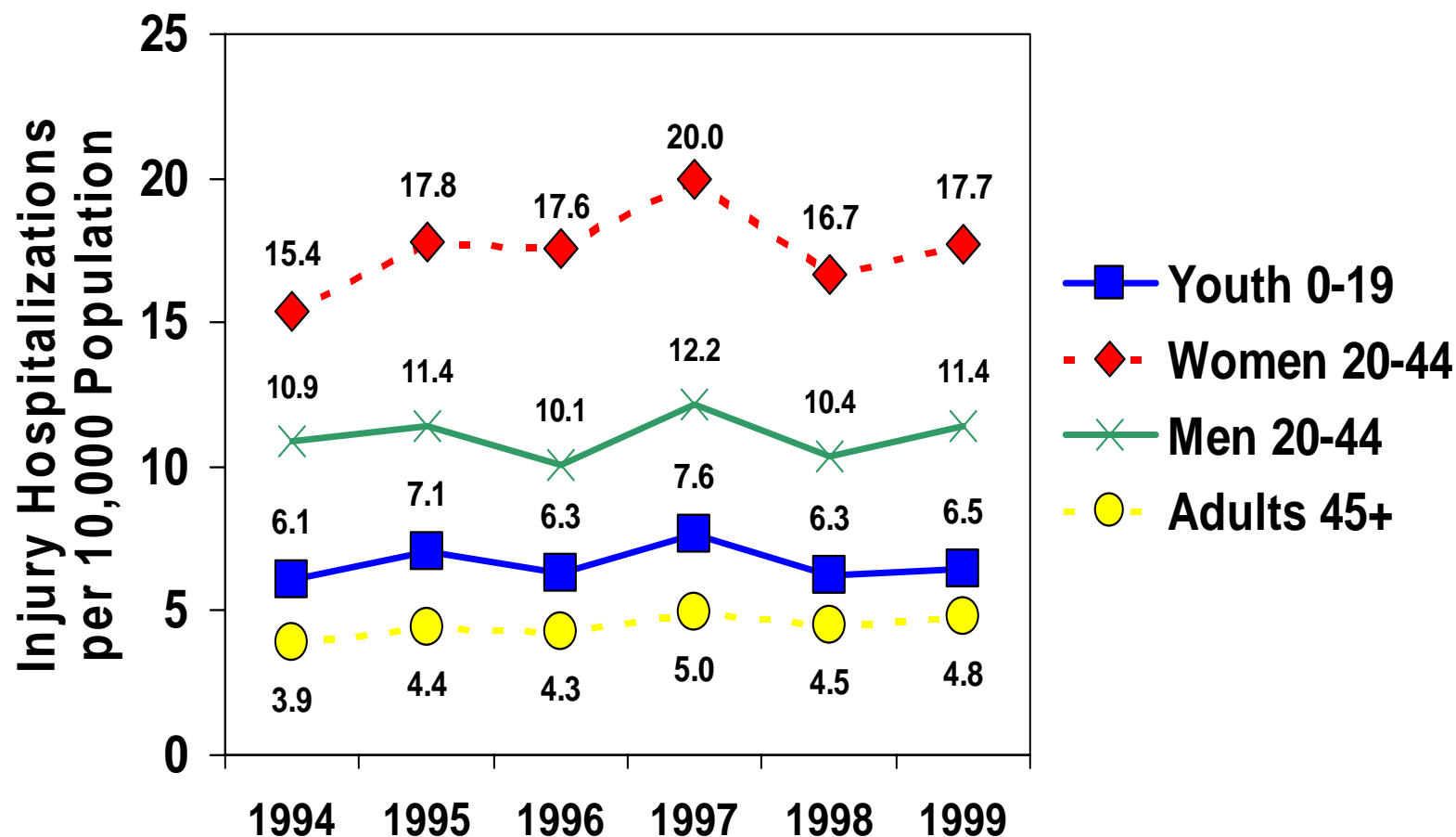
- ✓ Within nearly every age group, women are hospitalized for attempted suicide at higher rates than men, and Alaska Natives are hospitalized for attempted suicide at higher rates than Whites.
- ✓ Alaska Native men between the ages of 10 and 19 are hospitalized for suicide attempt at a rate nearly 6-fold that of White men.
- ✓ The rural-to-urban disparity in suicide attempt hospitalization rates is largely limited to those between the ages of 10 and 34.

Trends in Disparities among Suicide Attempt Hospitalization Rates

Alaska 1994-1999

Age-Specific Rates, Rate Ratios and Rate Differences
of Fatal and Nonfatal Suicide Attempts across 6 Years
with focus on Youth (0-19), Women and Men 20-44, and Older
Adults (45 and older)

Trends in Suicide Attempt Hospitalization Rates for Selected Groups: Alaska Residents, 1994-1999



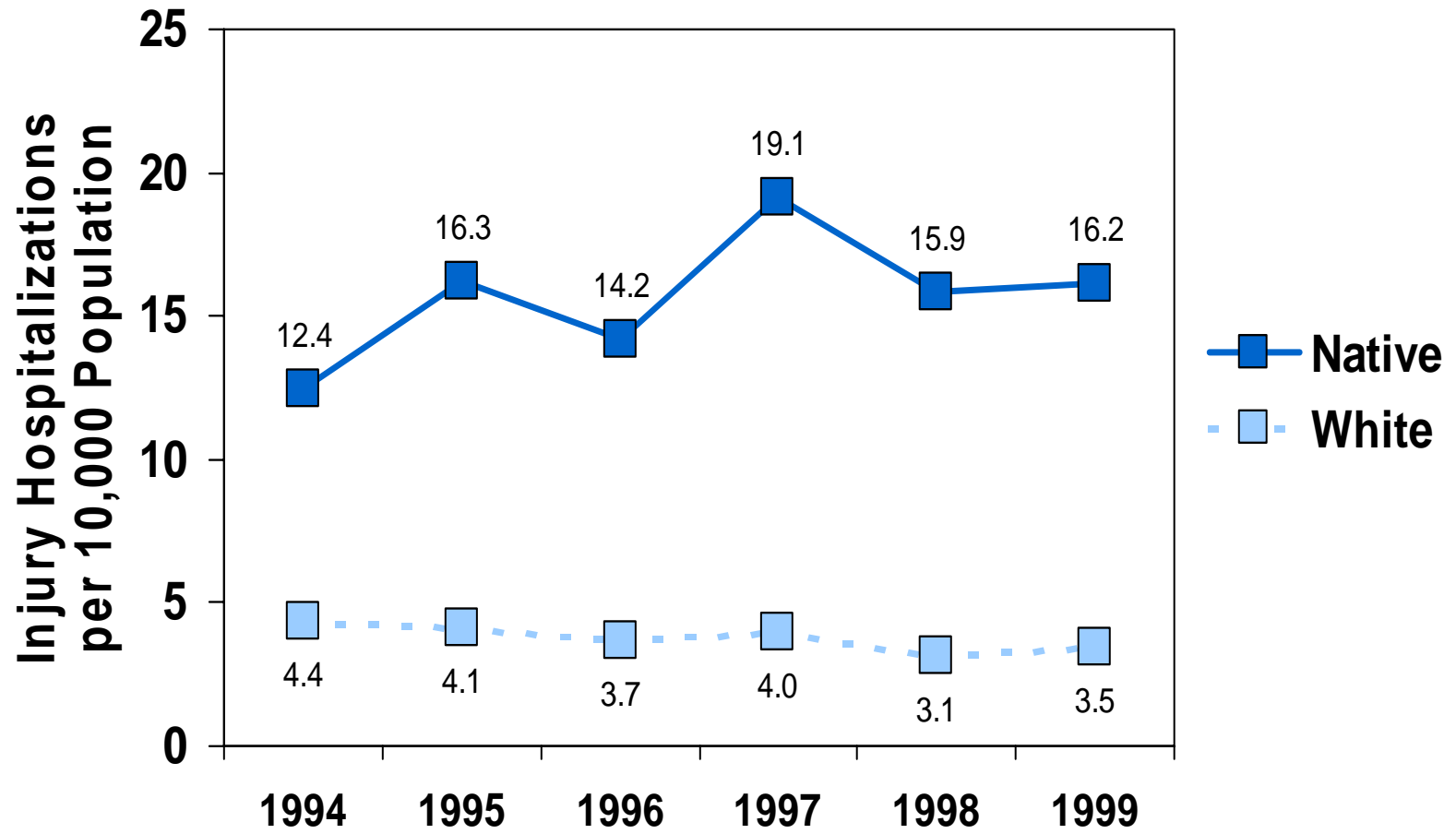
Source: DHSS/CHEMS, AK Trauma
Registry

Trends in Suicide Attempt Hospitalizations and Hospitalization Rates for Selected Groups: Alaska Residents, 1994-1999

Years	Total	Youth 0-19	Women 20-44	Men 20-44	Adults 45+
Hospitalizations					
1994	516	125	189	150	52
1995	575	146	214	153	62
1996	536	131	209	133	63
1997	628	160	234	157	77
1998	530	132	193	132	73
1999	564	137	202	143	82
Hospitalization Rates					
1994	8.59	6.1	15.4	10.9	3.9
1995	9.56	7.1	17.8	11.4	4.4
1996	8.86	6.3	17.6	10.1	4.3
1997	10.3	7.6	20.0	12.2	5.0
1998	8.59	6.3	16.7	10.4	4.5
1999	9.07	6.5	17.7	11.4	4.8

Source: DHSS/CHEMS, AK Trauma
Registry

Trends in Suicide Attempt Hospitalization Rates: Racial Disparities among *Youth 0-19* Alaska Residents, 1994-1999



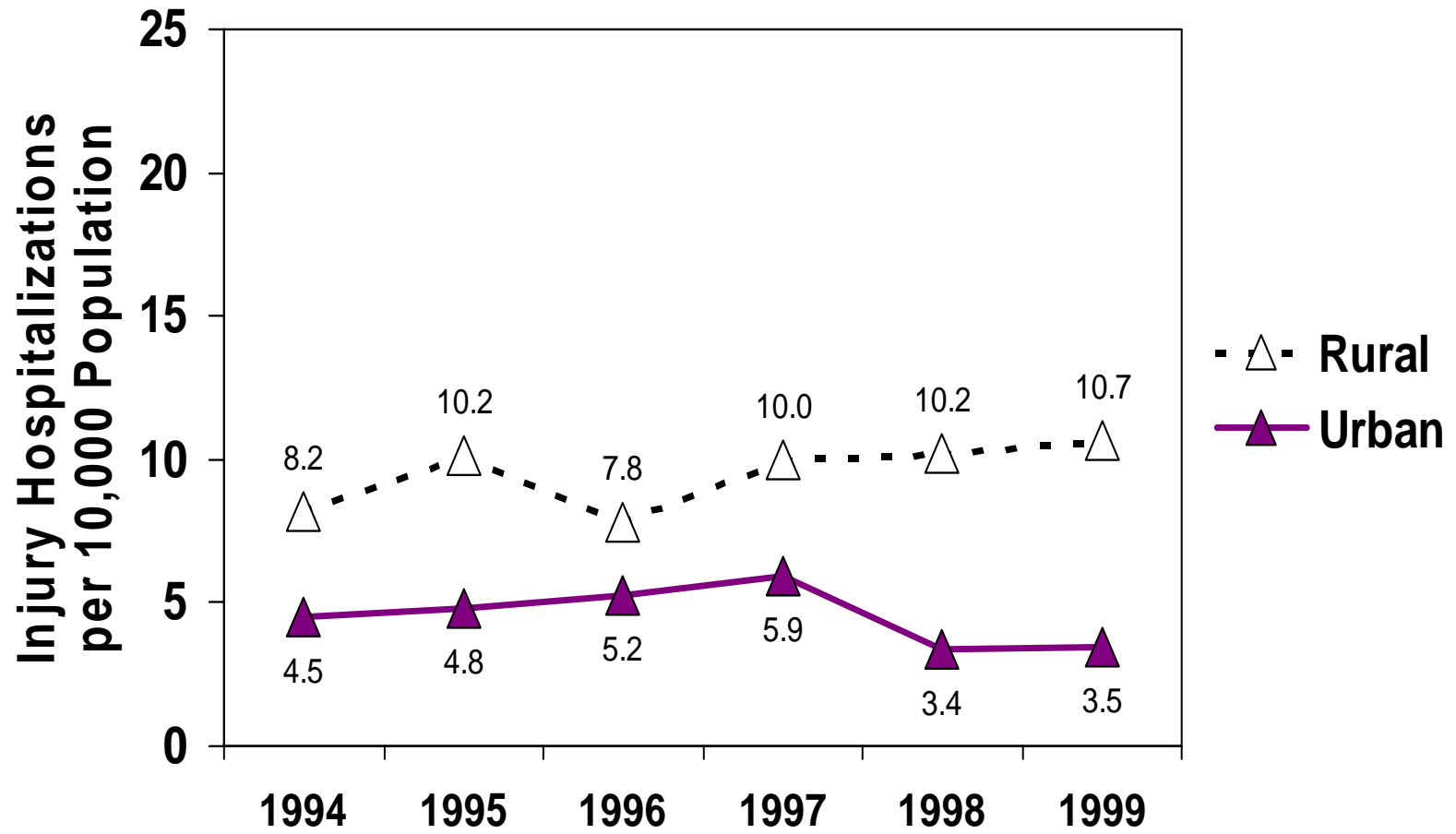
Source: DHSS/CHEMS, AK Trauma
Registry

Suicide Attempt Hospitalizations and Hospitalization Rates

by Race and Year, Native:White Rate Ratios and
Native-White Rate Differences: **Youth 0-19, 1994-1999**

Year	Native Rate	Native Hospitalizations	White Rate	White Hospitalizations	Rate Ratio (N:W)	Rate Difference (N-W)
1994	12.4	54	4.4	63	2.9	8.1
1995	16.3	72	4.1	59	4.0	12.2
1996	14.2	64	3.7	53	3.8	10.5
1997	19.1	88	4.0	57	4.8	15.2
1998	15.9	74	3.1	45	5.1	12.8
1999	16.2	76	3.5	50	4.7	12.7

Trends in Suicide Attempt Hospitalization Rates: Regional Disparities among *Youth 0-19* Alaska Residents, 1994-1999



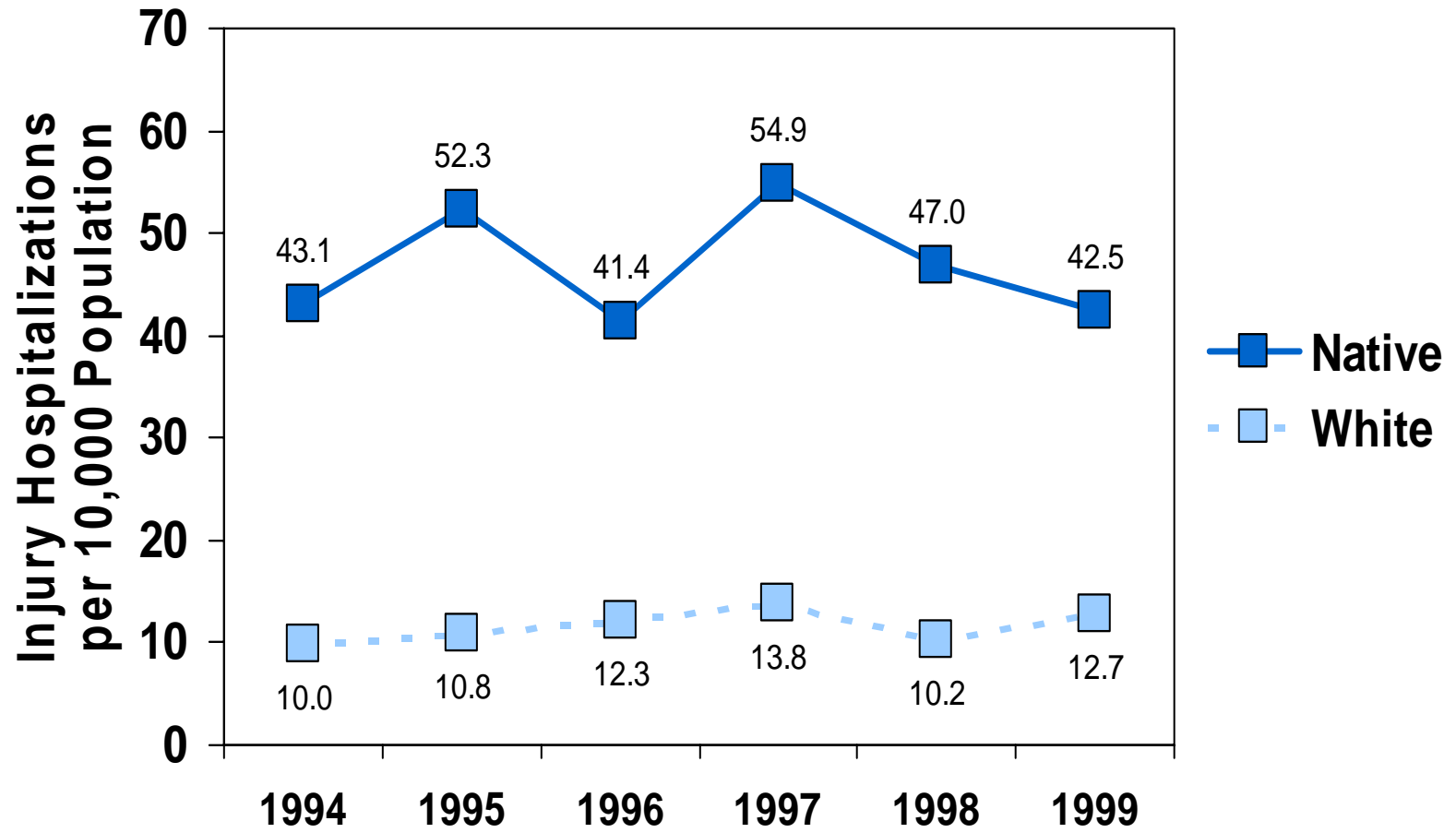
Source: DHSS/CHEMS, AK Trauma
Registry

Suicide Attempt Hospitalizations and Hospitalization Rates

by Region and Year, Rural:Urban Rate Ratios and
Rural-Urban Rate Differences: ***Youth 0-19***, 1994-1999

Year	Rural Rate	Rural Hospitalizations	Urban Rate	Urban Hospitalizations	Rate Ratio (R:U)	Rate Difference (R-U)
1994	8.2	70	4.5	55	1.8	3.7
1995	10.2	88	4.8	58	2.1	5.3
1996	7.8	68	5.2	63	1.5	2.6
1997	10.0	88	5.9	72	1.7	4.1
1998	10.2	91	3.4	41	3.1	6.9
1999	10.7	94	3.5	43	3.1	7.2

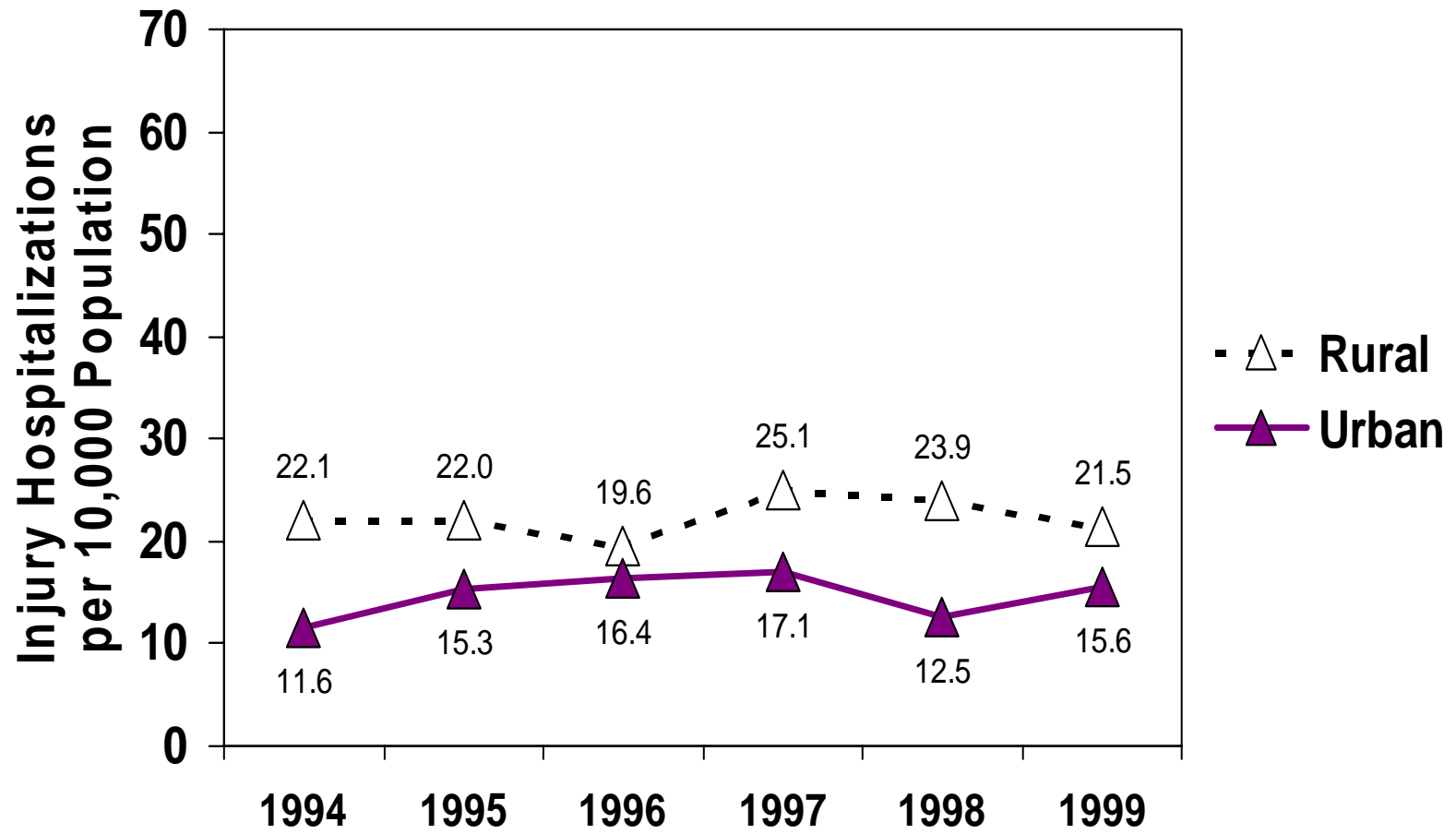
Trends in Suicide Attempt Hospitalization Rates: Racial Disparities among ***Women 20-44*** Alaska Residents, 1994-1999



Suicide Attempt Hospitalizations and Hospitalization Rates by Race and Year, Native:White Rate Ratios and Native-White Rate Differences: ***Women 20-44, 1994-1999***

Year	Native Rate	Native Hospitalizations	White Rate	White Hospitalizations	Rate Ratio (N:W)	Rate Difference (N-W)
1994	43.1	76	10.0	94	4.3	33.1
1995	52.3	93	10.8	99	4.8	41.5
1996	41.4	74	12.3	110	3.4	29.2
1997	54.9	99	13.8	121	4.0	41.1
1998	47.0	85	10.2	88	4.6	36.7
1999	42.5	77	12.7	107	3.3	29.8

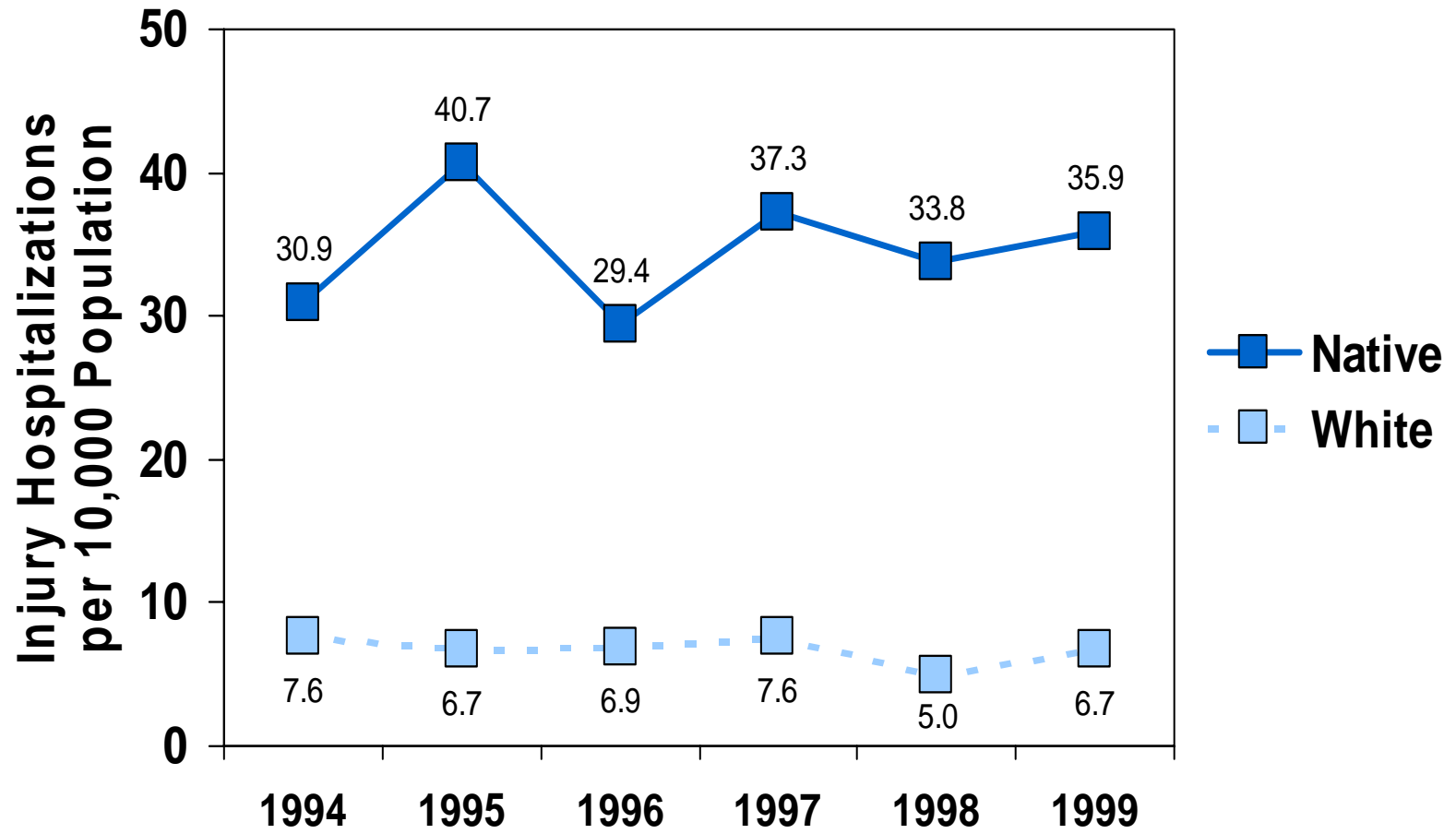
Trends in Suicide Attempt Hospitalization Rates: Regional Disparities among ***Women 20-44*** Alaska Residents, 1994-1999



Suicide Attempt Hospitalizations and Hospitalization Rates by Region and Year, Rural:Urban Rate Ratios and Rural-Urban Rate Differences: ***Women 20-44, 1994-1999***

Year	Rural Rate	Rural Hospitalizations	Urban Rate	Urban Hospitalizations	Rate Ratio (R:U)	Rate Difference (R-U)
1994	22.1	98	11.6	91	1.9	10.5
1995	22.0	97	15.3	117	1.4	6.7
1996	19.6	85	16.4	124	1.2	3.2
1997	25.1	107	17.1	127	1.5	8.0
1998	23.9	101	12.5	92	1.9	11.4
1999	21.5	89	15.6	113	1.4	5.9

Trends in Suicide Attempt Hospitalization Rates: Racial Disparities among **Men 20-44** Alaska Residents, 1994-1999

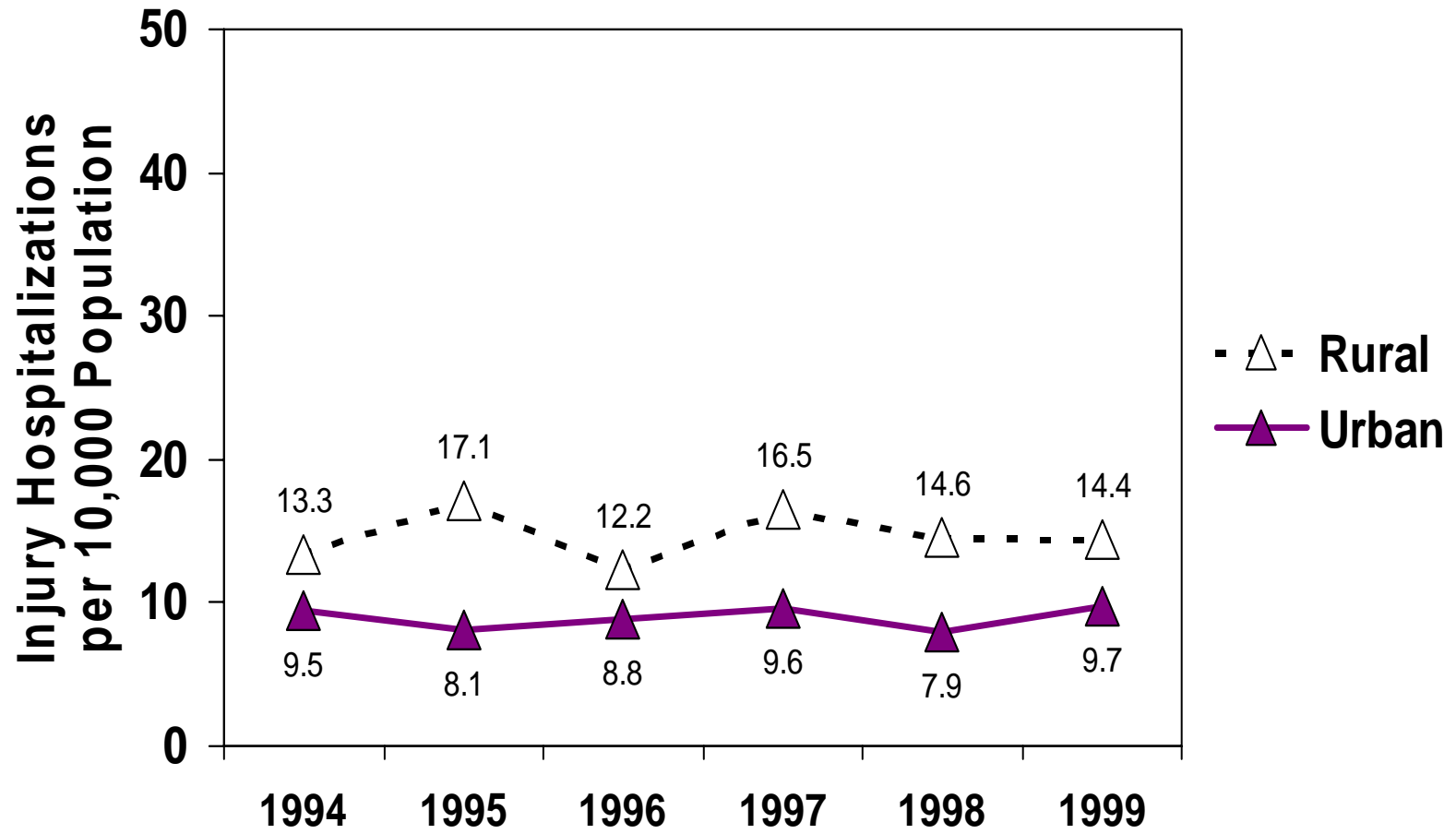


Source: DHSS/CHEMS, AK Trauma
Registry

Suicide Attempt Hospitalizations and Hospitalization Rates by Race and Year, Native:White Rate Ratios and Native-White Rate Differences: *Men 20-44, 1994-1999*

Year	Native Rate	Native Hospitalizations	White Rate	White Hospitalizations	Rate Ratio (N:W)	Rate Difference (N-W)
1994	30.9	55	7.6	81	4.1	23.3
1995	40.7	73	6.7	69	6.1	34.0
1996	29.4	53	6.9	69	4.3	22.5
1997	37.3	68	7.6	74	4.9	29.7
1998	33.8	62	5.0	47	6.8	28.9
1999	35.9	66	6.7	62	5.3	29.2

Trends in Suicide Attempt Hospitalization Rates: Regional Disparities among ***Men 20-44*** Alaska Residents, 1994-1999

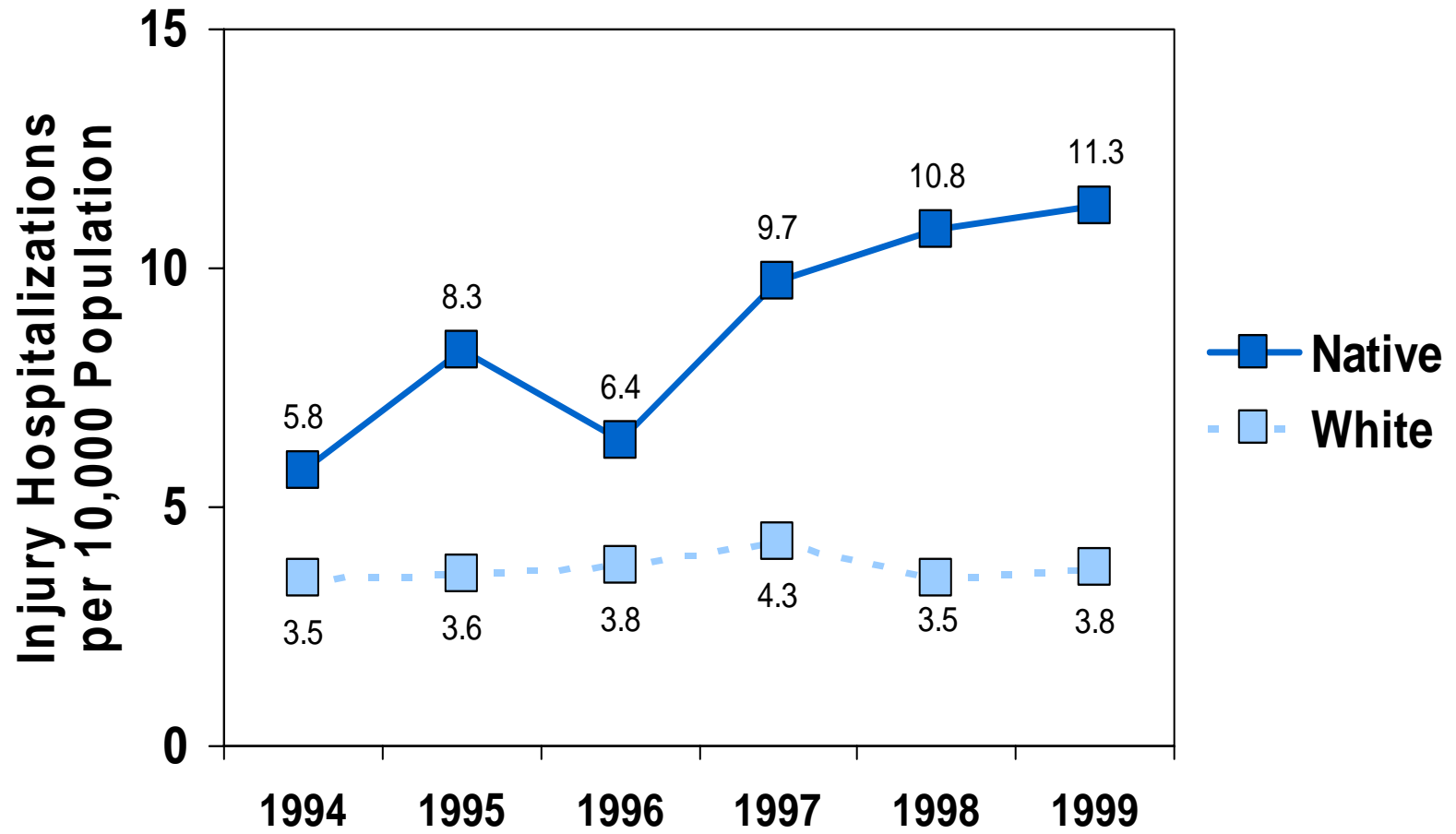


Source: DHSS/CHEMS, AK Trauma
Registry

Suicide Attempt Hospitalizations and Hospitalization Rates by Region and Year, Rural:Urban Rate Ratios and Rural-Urban Rate Differences: *Men 20-44, 1994-1999*

Year	Rural Rate	Rural Hospitalizations	Urban Rate	Urban Hospitalizations	Rate Ratio (R:U)	Rate Difference (R-U)
1994	13.3	68	9.5	82	1.4	3.9
1995	17.1	85	8.1	68	2.1	9.0
1996	12.2	60	8.8	73	1.4	3.4
1997	16.5	79	9.6	78	1.7	6.8
1998	14.6	69	7.9	63	1.8	6.7
1999	14.4	67	9.7	76	1.5	4.7

Trends in Suicide Attempt Hospitalization Rates: Racial Disparities among **Adults 45+** Alaska Residents, 1994-1999

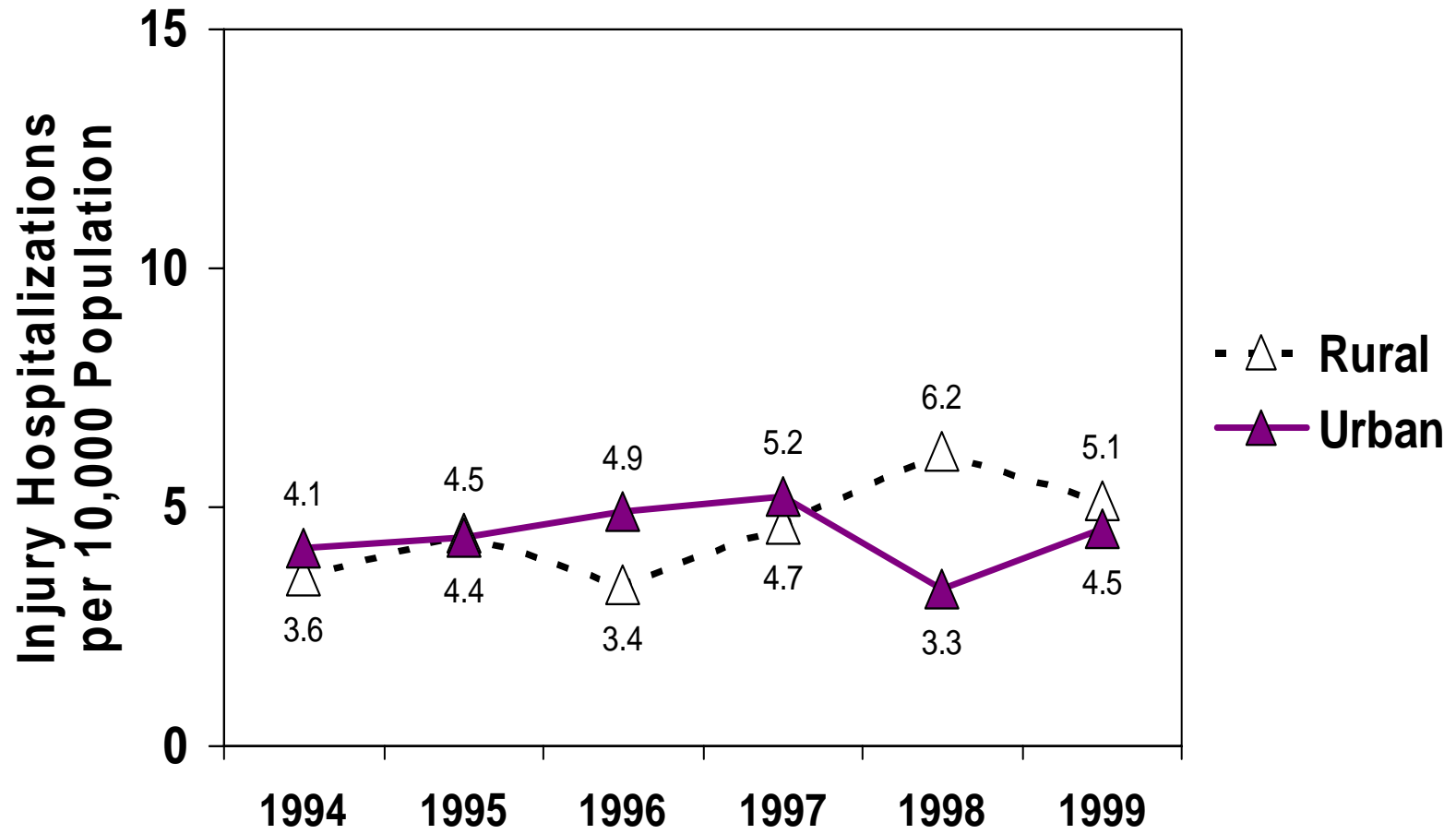


Source: DHSS/CHEMS, AK Trauma
Registry

Suicide Attempt Hospitalizations and Hospitalization Rates by Race and Year, Native:White Rate Ratios and Native-White Rate Differences: *Adults 45+, 1994-1999*

Year	Native Rate	Native Hospitalizations	White Rate	White Hospitalizations	Rate Ratio (N:W)	Rate Difference (N-W)
1994	5.8	10	3.5	38	1.6	2.3
1995	8.3	15	3.6	41	2.3	4.7
1996	6.4	12	3.8	45	1.7	2.6
1997	9.7	19	4.3	53	2.3	5.5
1998	10.8	22	3.5	46	3.1	7.3
1999	11.3	24	3.8	52	3.0	7.6

Trends in Suicide Attempt Hospitalization Rates: Regional Disparities among **Adults 45+** Alaska Residents, 1994-1999



Source: DHSS/CHEMS, AK Trauma
Registry

Suicide Attempt Hospitalizations and Hospitalization Rates by Region and Year, Rural:Urban Rate Ratios and Rural-Urban Rate Differences: ***Adults 45+, 1994-1999***

Year	Rural Rate	Rural Hospitalizations	Urban Rate	Urban Hospitalizations	Rate Ratio (R:U)	Rate Difference (R-U)
1994	3.6	20	4.1	32	0.9	-0.6
1995	4.5	26	4.4	36	1.0	0.1
1996	3.4	21	4.9	42	0.7	-1.5
1997	4.7	30	5.2	47	0.9	-0.6
1998	6.2	42	3.3	31	1.9	2.9
1999	5.1	37	4.5	45	1.1	0.6

Summary: Trends in Suicide Attempt Disparities

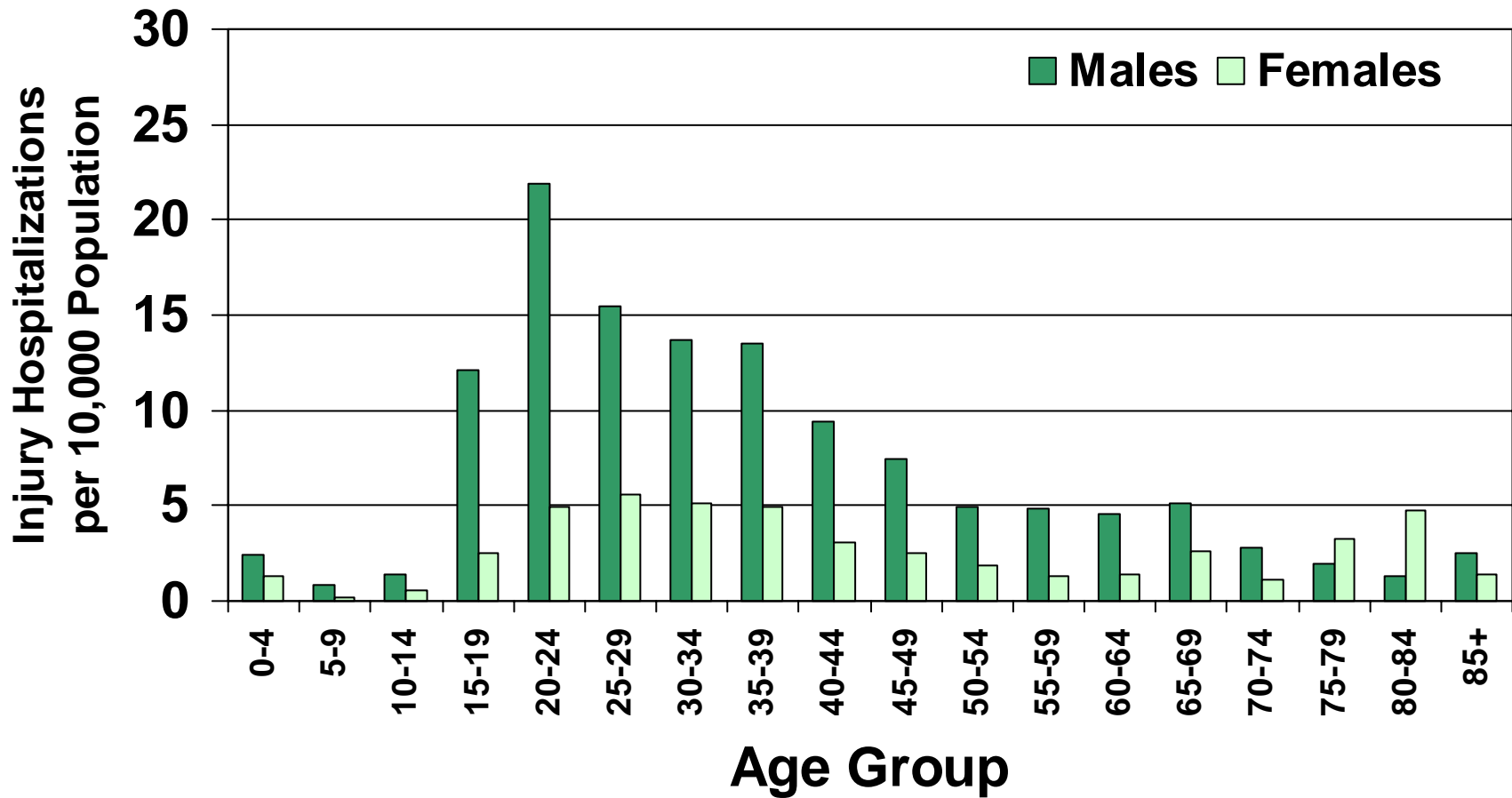
- ✓ Suicide attempt hospitalization rates have not declined over the past 6 years.
- ✓ Racial disparities in suicide attempt hospitalization rates have increased among both youth 0-19 and those over age 44, and have persisted among both women and men 20-44.
- ✓ Regional disparities in these rates, smaller than the racial disparities, have increased slightly in the 0-19 age group.

Assault Hospitalization Rates

Alaska, 1994-1999

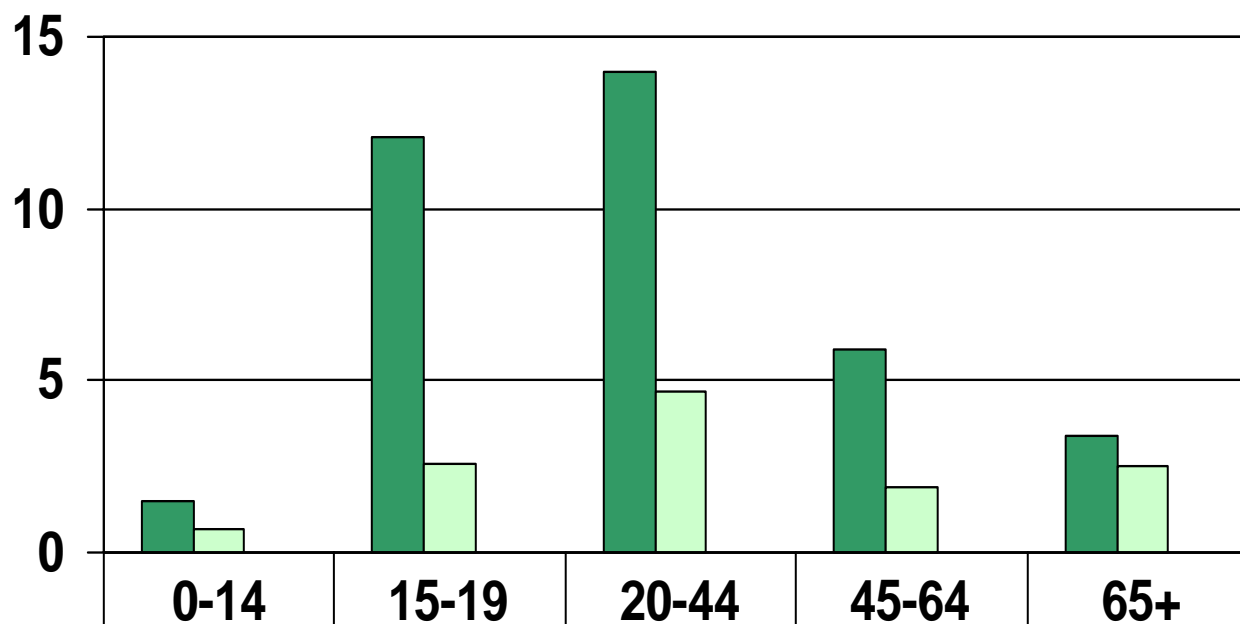
Age-Specific Rates by Sex, Race, and Region

Assault Hospitalization Rates by Sex, 5-year Age Groups, Alaska Residents, 1994-1999



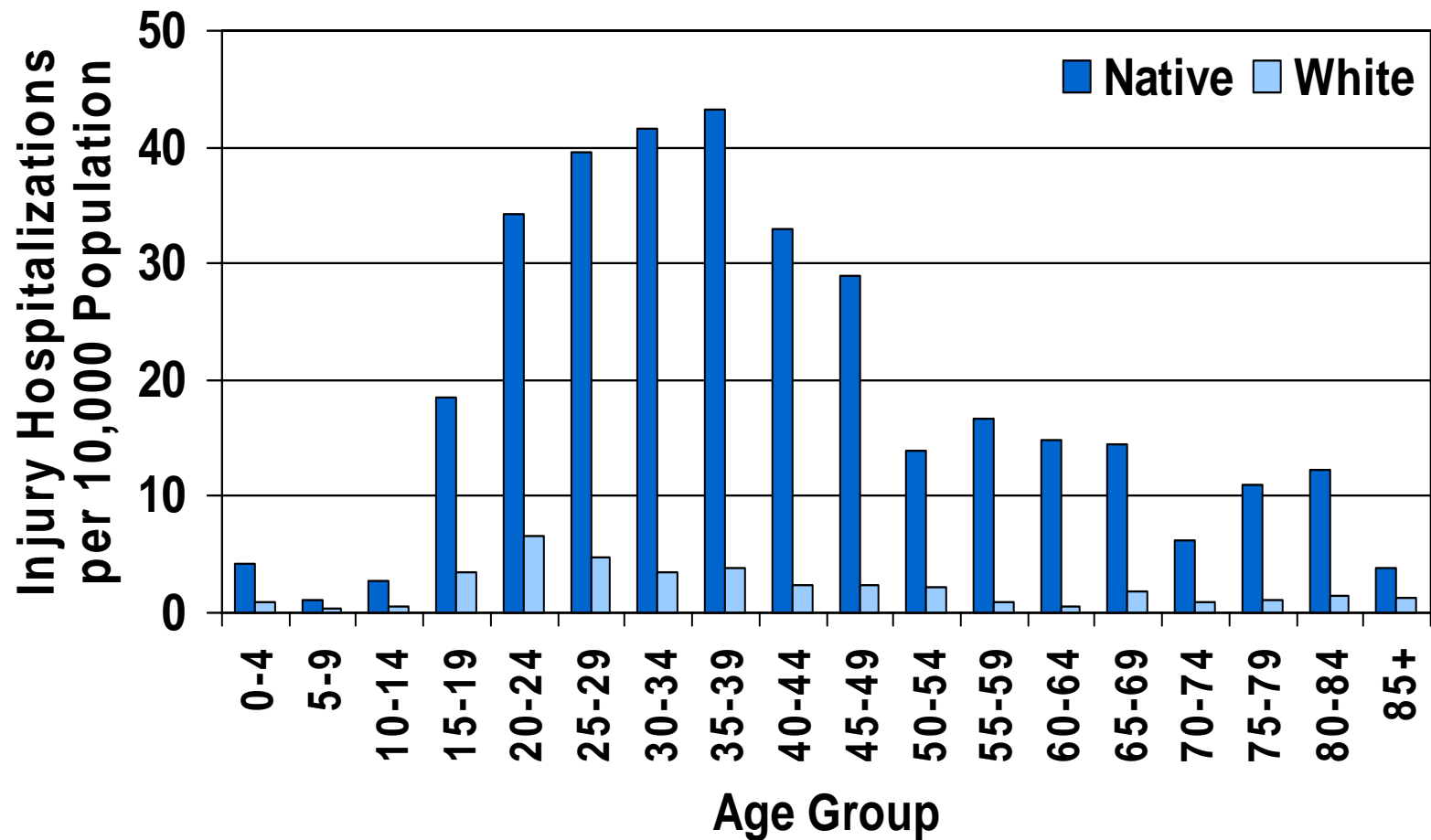
Assault Hospitalization Rate by Age and Sex Alaska Residents, 1994-1999

**Injury Hospitalizations
per 10,000 Population**



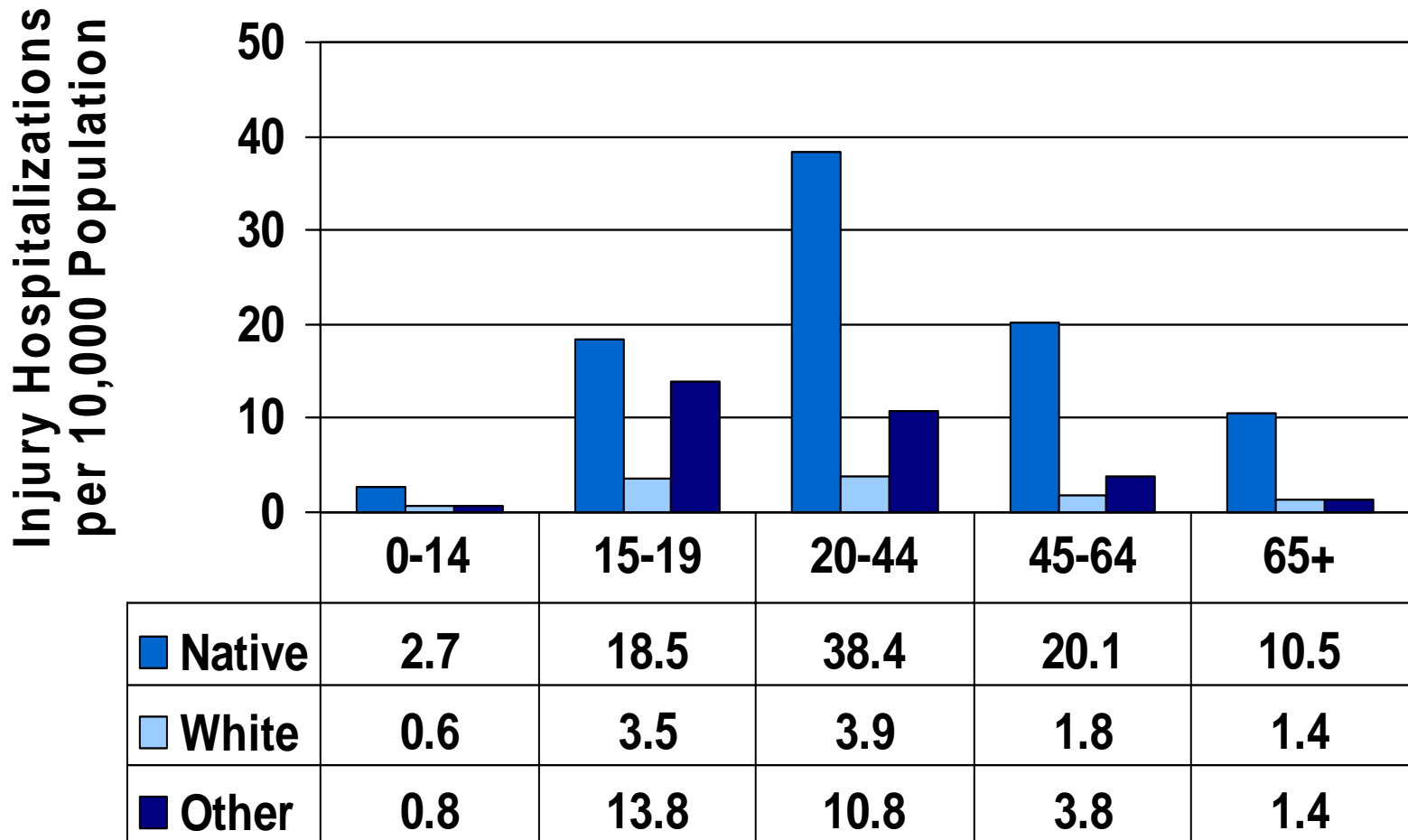
 Males	1.5	12.1	14	5.9	3.4
 Females	0.7	2.6	4.7	1.9	2.5
M:F RR	2.1	4.7	3	3.1	1.4

Assault Hospitalization Rate by Race, 5-Year Age Groups, Alaska Residents, 1994-1999

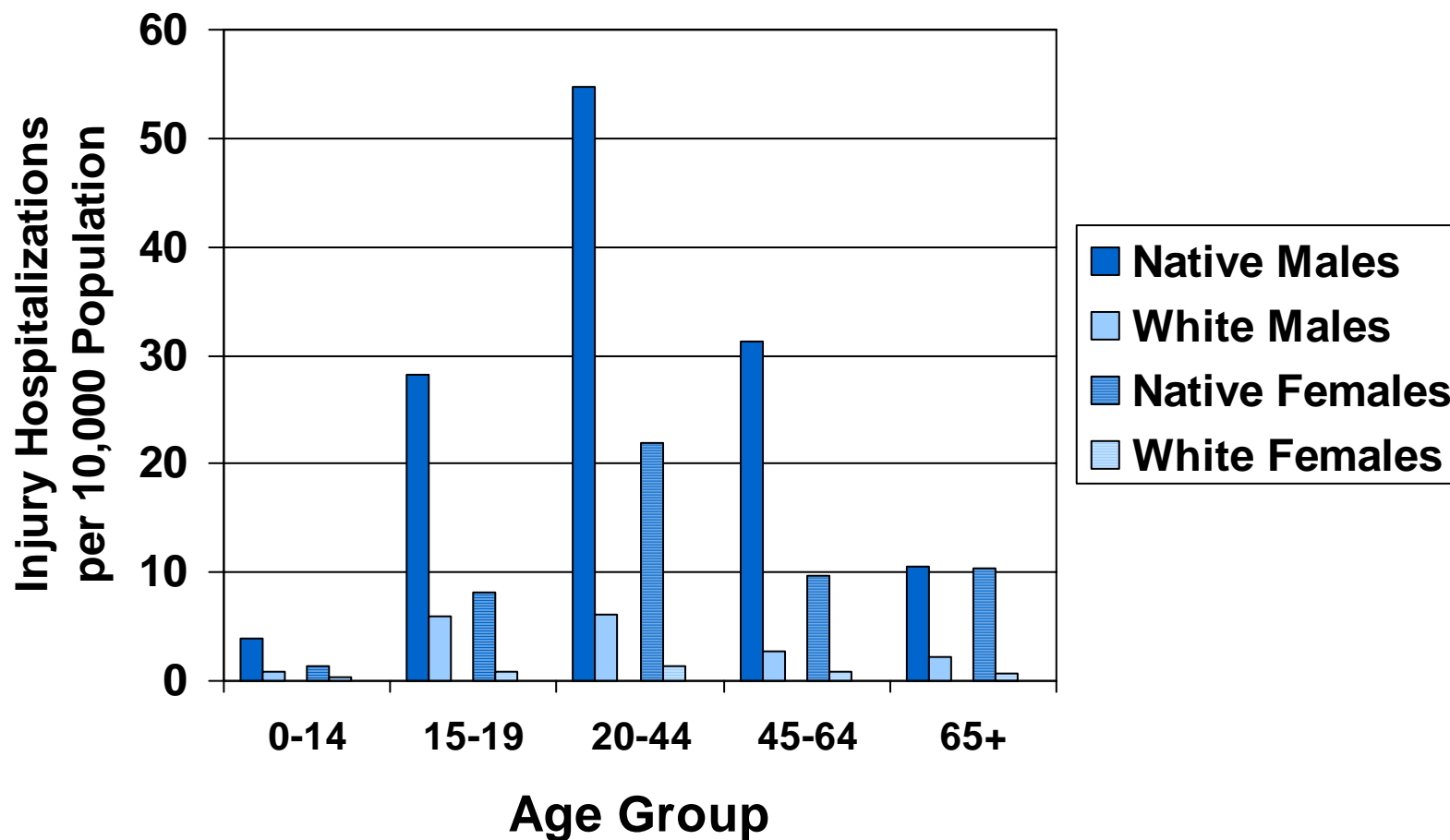


Assault Hospitalization Rate by Age and Race

Alaska Residents, 1994-1999



Assault Hospitalization Rate by Age, Sex, and Race (Graph) Alaska Residents, 1994-1999

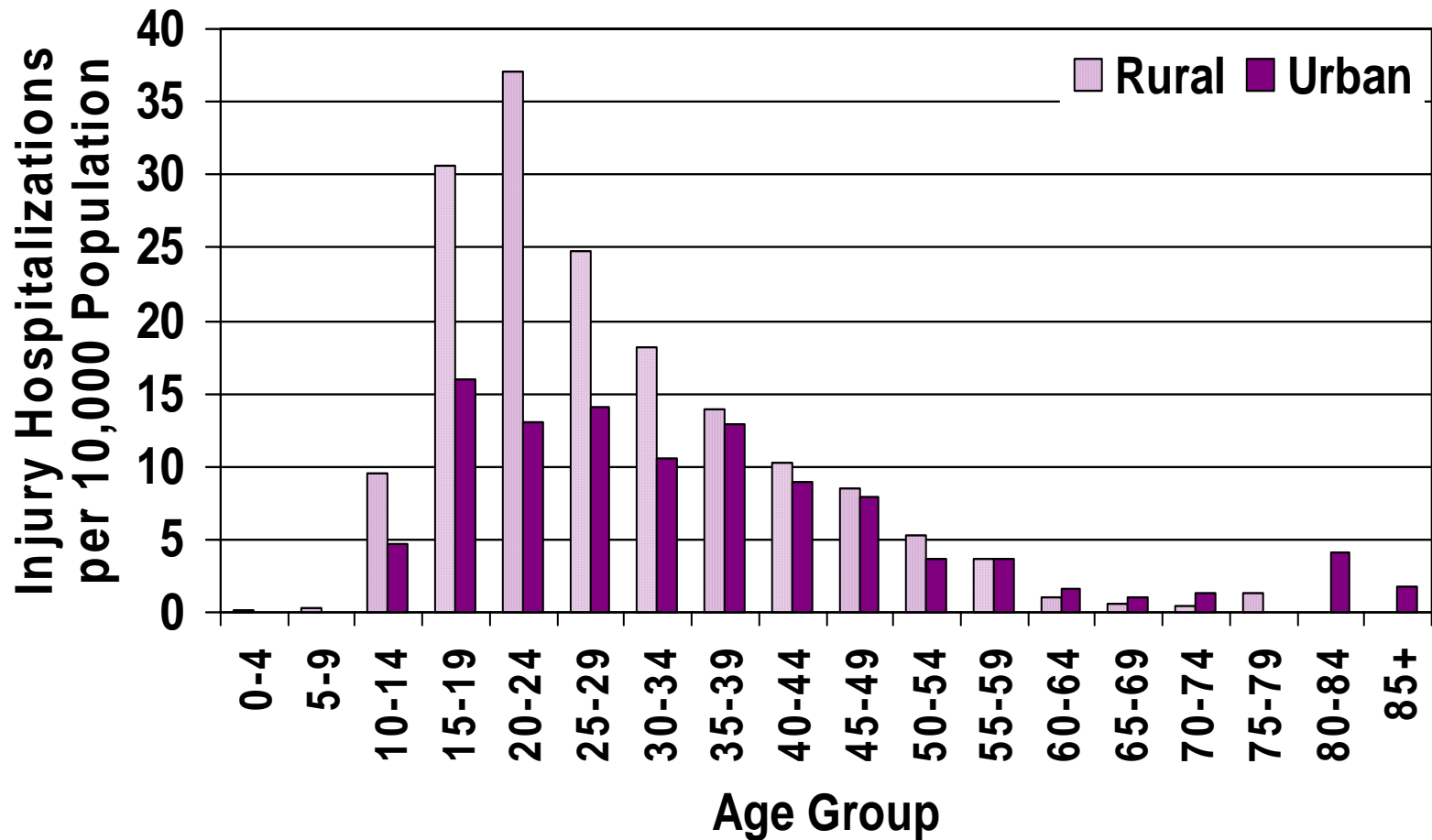


Assault Hospitalization Rate by Age, Sex, and Race (Data Table) Alaska Residents, 1994-1999

Sex	Age Group	Native		White		Rate Ratio (N:W)
		Count	Rate	Count	Rate	
Males						
	0-14	43	3.9	29	0.8	4.6
	15-19	80	28.2	59	6.0	4.7
	20-44	595	54.8	366	6.2	8.9
	45-64	128	31.2	87	2.7	11.7
	65+	14	10.6	15	2.2	4.8
Females						
	0-14	15	1.4	14	0.4	3.3
	15-19	22	8.2	8	0.9	9.3
	20-44	235	21.9	72	1.4	16.2
	45-64	42	9.7	20	0.8	12.9
	65+	18	10.4	5	0.7	14.9

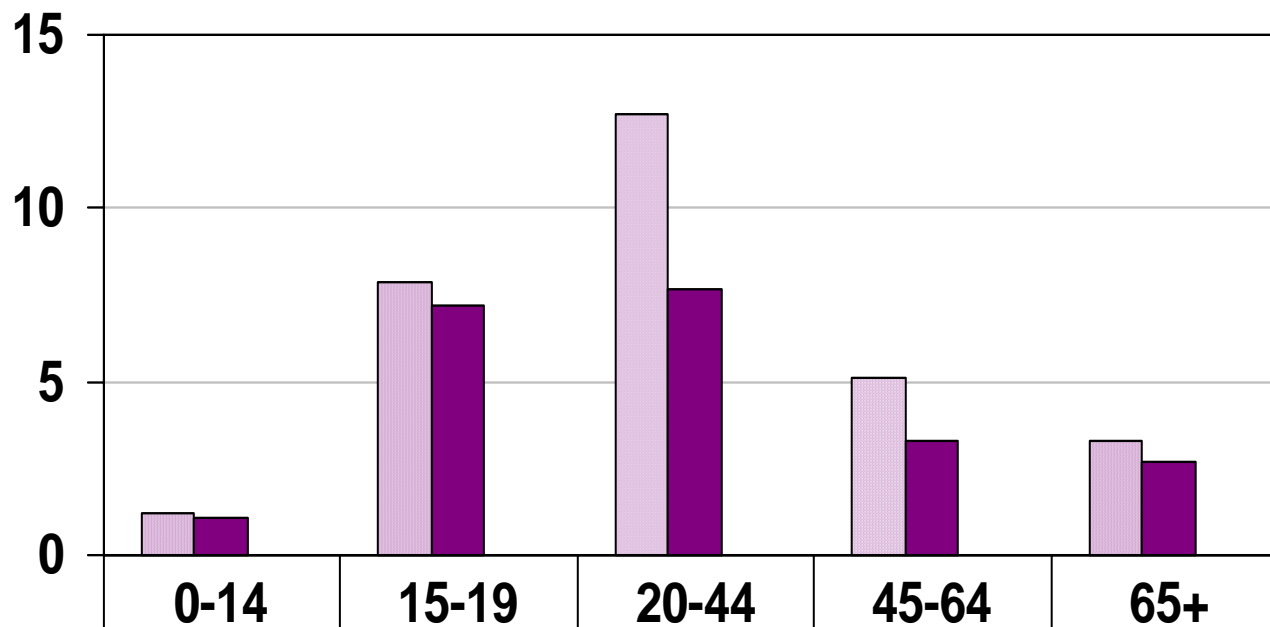
Source: DHSS/CHEMS, AK Trauma
Registry

Assault Hospitalization Rate by Region of Residence, 5-Year Age Groups Alaska Residents, 1994-1999



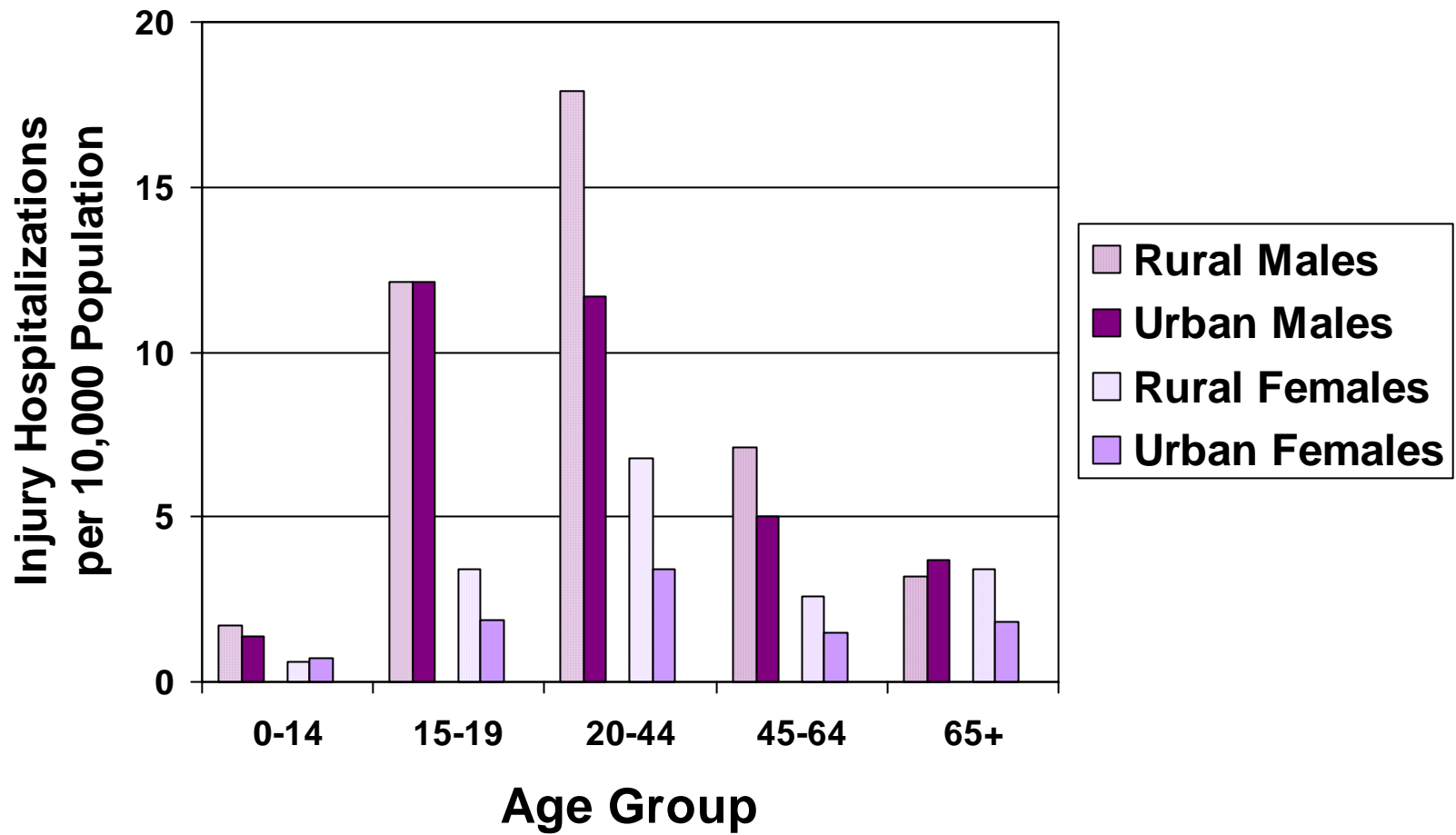
Assault Hospitalization Rate by Age and Region of Residence Alaska Residents, 1994-1999

Injury Hospitalizations
per 10,000 Population



	0-14	15-19	20-44	45-64	65+
 Rural	1.2	7.9	12.7	5.1	3.3
 Urban	1.1	7.2	7.7	3.3	2.7
R:U RR	1.1	1.1	1.6	1.5	1.2

Assault Hospitalization Rate by Age, Sex and Region of Residence (Graph) Alaska Residents, 1994-1999



Assault Hospitalization Rate by Age, Sex and Region of Residence (Data Table) Alaska Residents, 1994-1999

Sex	Age Group	Rural		Urban		Rate Ratio (R:U)
		Count	Rate	Count	Rate	
Males						
	0-14	35	1.7	41	1.4	1.2
	15-19	74	12.1	96	12.1	1.0
	20-44	522	17.9	577	11.7	1.5
	45-64	118	7.1	112	5.0	1.4
	65+	13	3.2	17	3.7	0.9
Females						
	0-14	12	0.6	20	0.7	
	15-19	19	3.4	14	1.9	1.7
	20-44	176	6.8	154	3.4	2.0
	45-64	35	2.6	30	1.5	1.8
	65+	14	3.4	10	1.8	1.8

Summary: Assault Hospitalization Rates

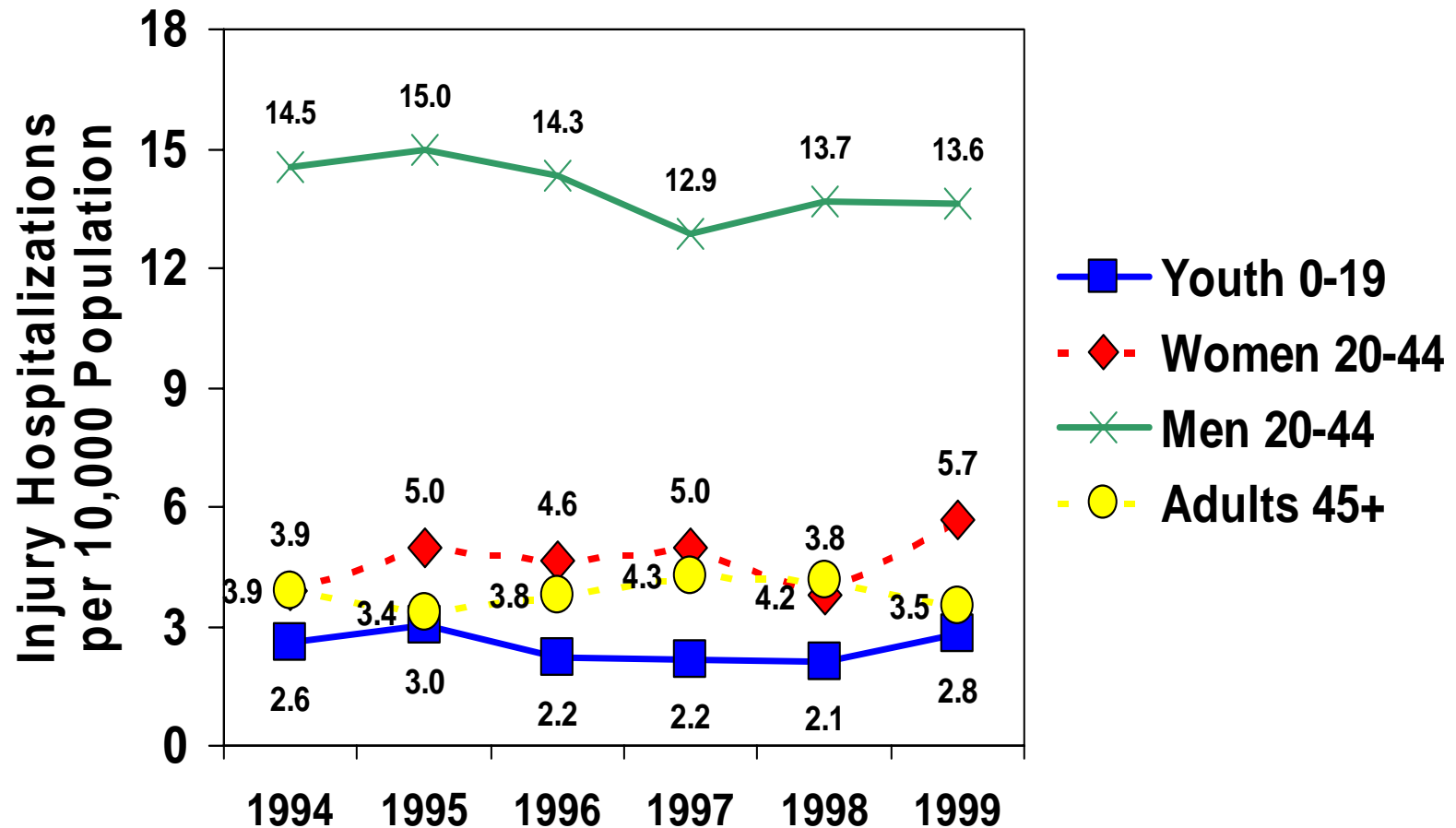
- ✓ Rates of hospitalization for assault injuries are higher for men than for women until age 75.
- ✓ Assault hospitalization rates for Alaska Native are higher than for Whites, with the largest Native-to-White rate ratio (25) among 60-64 years-olds.
- ✓ When considering only Alaska Native and White men and women, the highest assault hospitalization rates are found among Alaska Native males; however, the largest Native-to-White rate ratio is found among women age 20-44.
- ✓ Regional disparities in rates of hospitalization for assault injuries are largely limited to those age 10-34, and are slightly more pronounced among women compared to men.

Trends in Disparities among Assault Hospitalization Rates

Alaska 1994-1999

Age-Specific Rates, Rate Ratios
and Rate Differences across 6 Years
with focus on Youth (0-19), Women and Men 20-44,
and Older Adults (45 and older)

Trends in Assault Hospitalization Rates for Selected Groups: Alaska Residents, 1994-1999



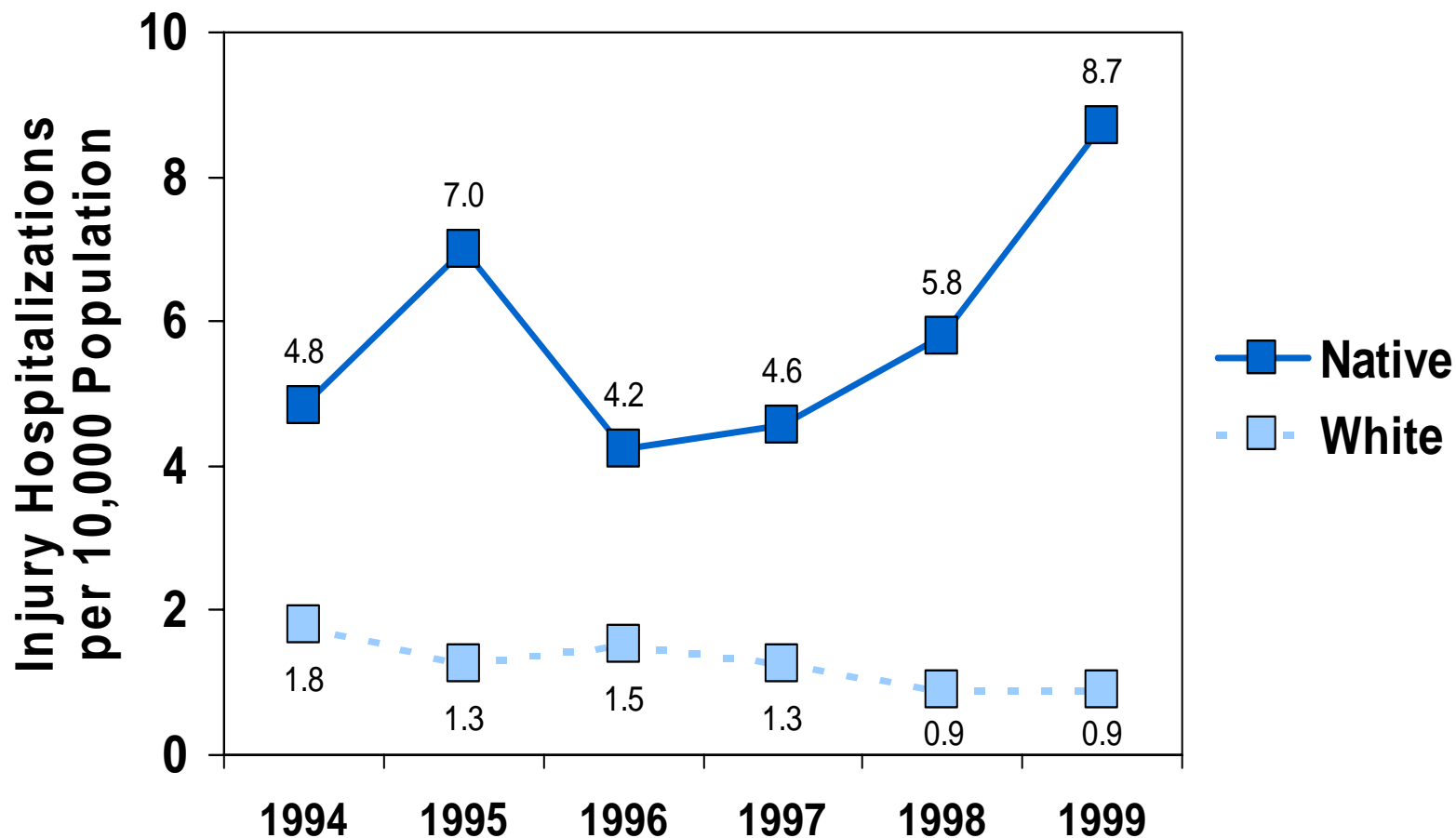
Source: DHSS/CHEMS, AK Trauma
Registry

Trends in Assault Hospitalizations and Hospitalization Rates for Selected Groups: Alaska Residents, 1994-1999

Years	Total	Youth 0-19	Women 20-44	Men 20-44	Adults 45+
Hospitalizations					
1994	353	53	48	200	52
1995	371	63	60	201	47
1996	346	46	55	189	56
1997	335	45	58	166	66
1998	331	45	44	174	68
1999	354	59	65	170	60
Hospitalization Rates					
1994	5.9	2.6	3.9	14.5	3.9
1995	6.2	3.0	5.0	15.0	3.4
1996	5.7	2.2	4.6	14.3	3.8
1997	5.5	2.2	5.0	12.9	4.3
1998	5.4	2.1	3.8	13.7	4.2
1999	5.7	2.8	5.7	13.6	3.5

Source: DHSS/CHEMS, AK Trauma
Registry

Trends in Assault Hospitalization Rates: Racial Disparities among *Youth 0-19* Alaska Residents, 1994-1999

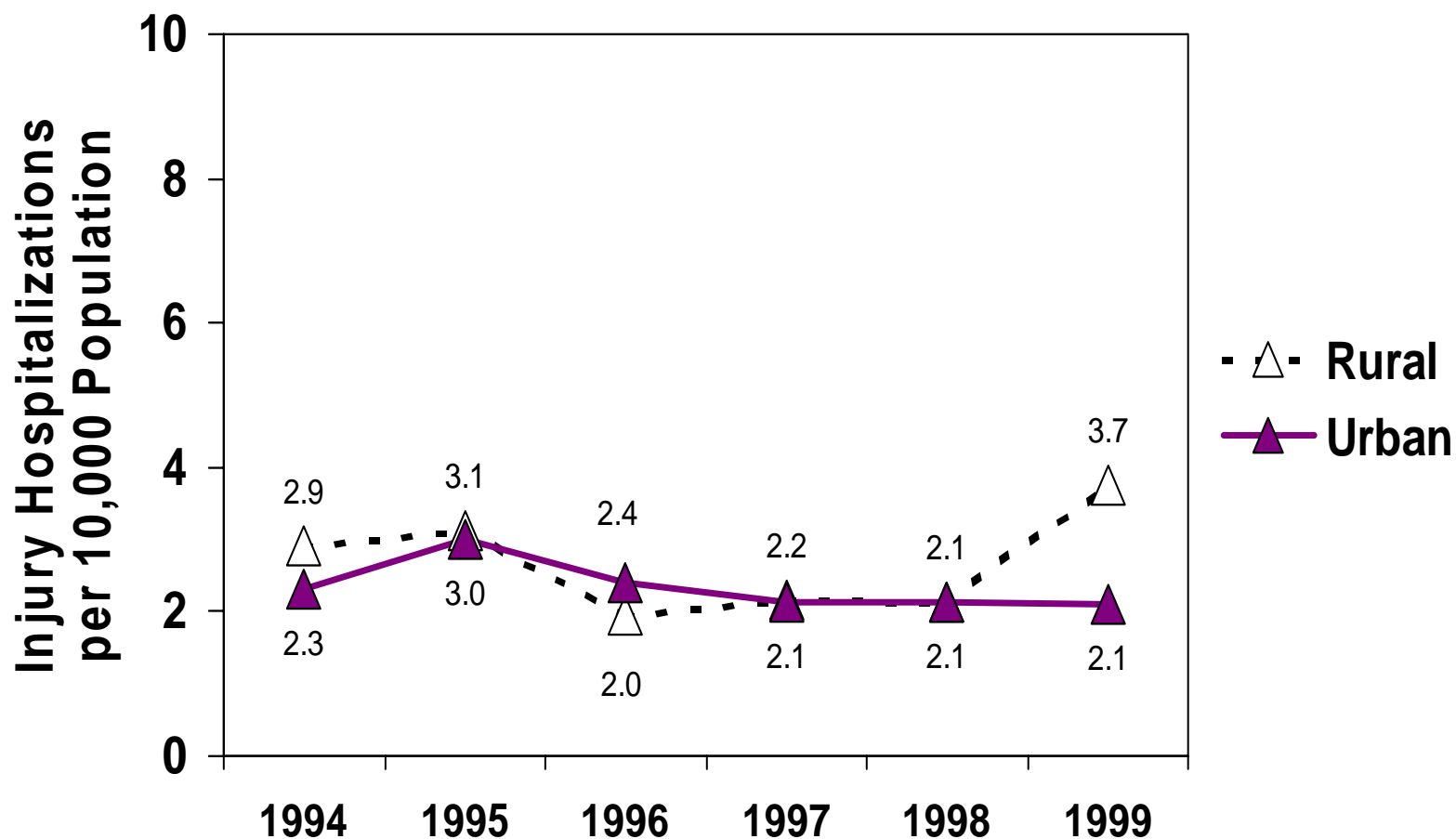


Source: DHSS/CHEMS, AK Trauma
Registry

Assault Hospitalizations and Hospitalization Rates by Race and Year, Native:White Rate Ratios and Native-White Rate Differences: ***Youth 0-19, 1994-1999***

Year	Native Rate	Native Hospitalizations	White Rate	White Hospitalizations	Rate Ratio (N:W)	Rate Difference (N-W)
1994	4.8	21	1.8	26	2.7	3.0
1995	7.0	31	1.3	18	5.6	5.8
1996	4.2	19	1.5	22	2.7	2.7
1997	4.6	21	1.3	18	3.7	3.3
1998	5.8	27	0.9	13	6.4	4.9
1999	8.7	41	0.9	13	9.7	7.8

Trends in Assault Hospitalization Rates: Regional Disparities among **Youth 0-19** Alaska Residents, 1994-1999



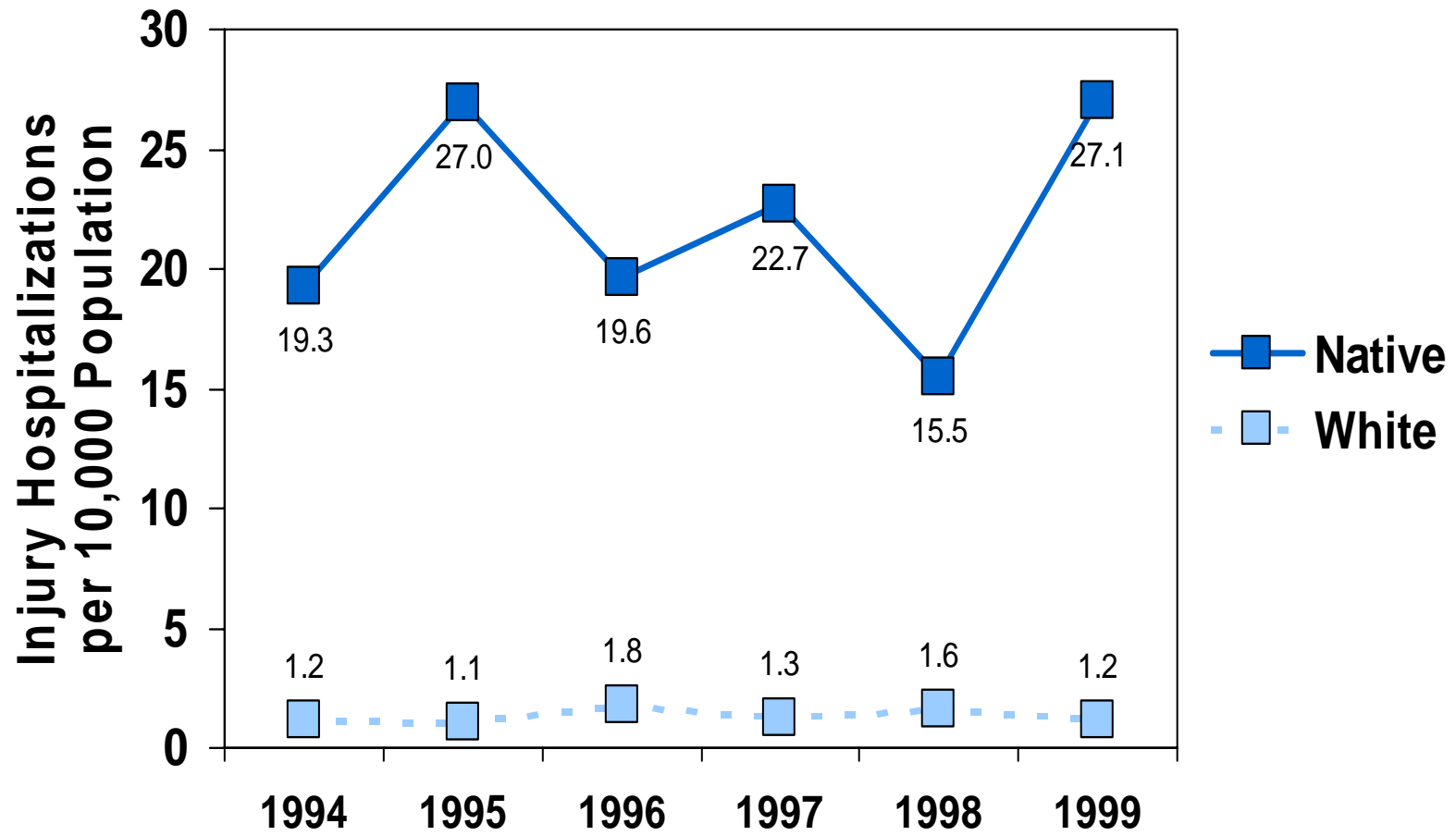
Source: DHSS/CHEMS, AK Trauma
Registry

Assault Hospitalizations and Hospitalization Rates

by Region and Year, Rural:Urban Rate Ratios and
Rural-Urban Rate Differences: ***Youth 0-19***, 1994-1999

Year	Rural Rate	Rural Hospitalizations	Urban Rate	Urban Hospitalizations	Rate Ratio (R:U)	Rate Difference (R-U)
1994	2.9	25	2.3	28	1.3	0.6
1995	3.1	27	3.0	36	1.0	0.1
1996	2.0	17	2.4	29	0.8	-0.5
1997	2.2	19	2.1	26	1.0	0.0
1998	2.1	19	2.1	26	1.0	0.0
1999	3.7	33	2.1	26	1.8	1.6

Trends in Assault Hospitalization Rates: Racial Disparities among **Women 20-44** Alaska Residents, 1994-1999

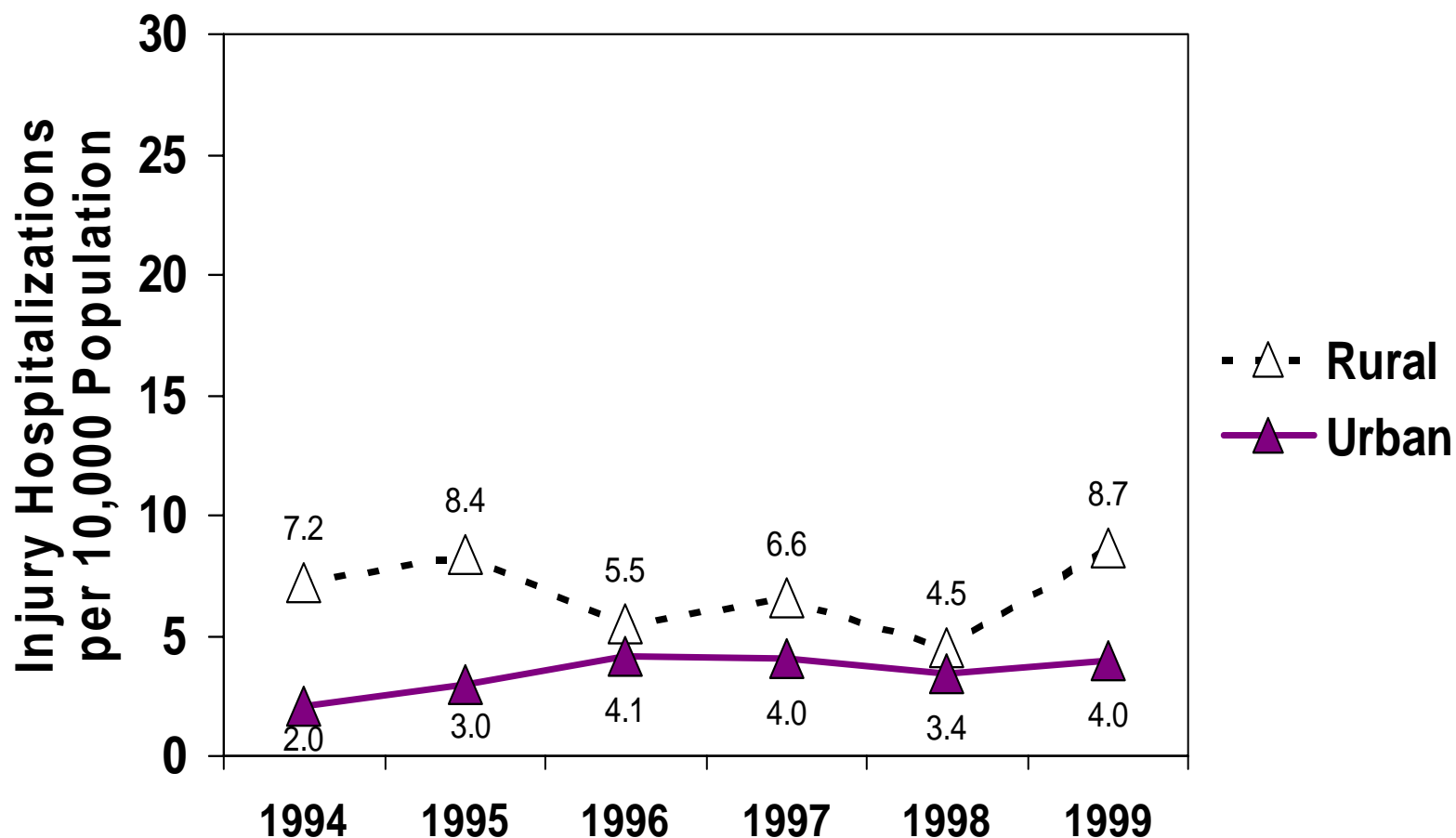


Source: DHSS/CHEMS, AK Trauma
Registry

Assault Hospitalizations and Hospitalization Rates by Race and Year, Native:White Rate Ratios and Native-White Rate Differences: ***Women 20-44, 1994-1999***

Year	Native Rate	Native Hospitalizations	White Rate	White Hospitalizations	Rate Ratio (N:W)	Rate Difference (N-W)
1994	19.3	34	1.2	11	16.5	18.1
1995	27.0	48	1.1	10	24.8	25.9
1996	19.6	35	1.8	16	11.0	17.8
1997	22.7	41	1.3	11	18.2	21.5
1998	15.5	28	1.6	14	9.5	13.8
1999	27.1	49	1.2	10	22.7	25.9

Trends in Assault Hospitalization Rates: Regional Disparities among **Women 20-44** Alaska Residents, 1994-1999

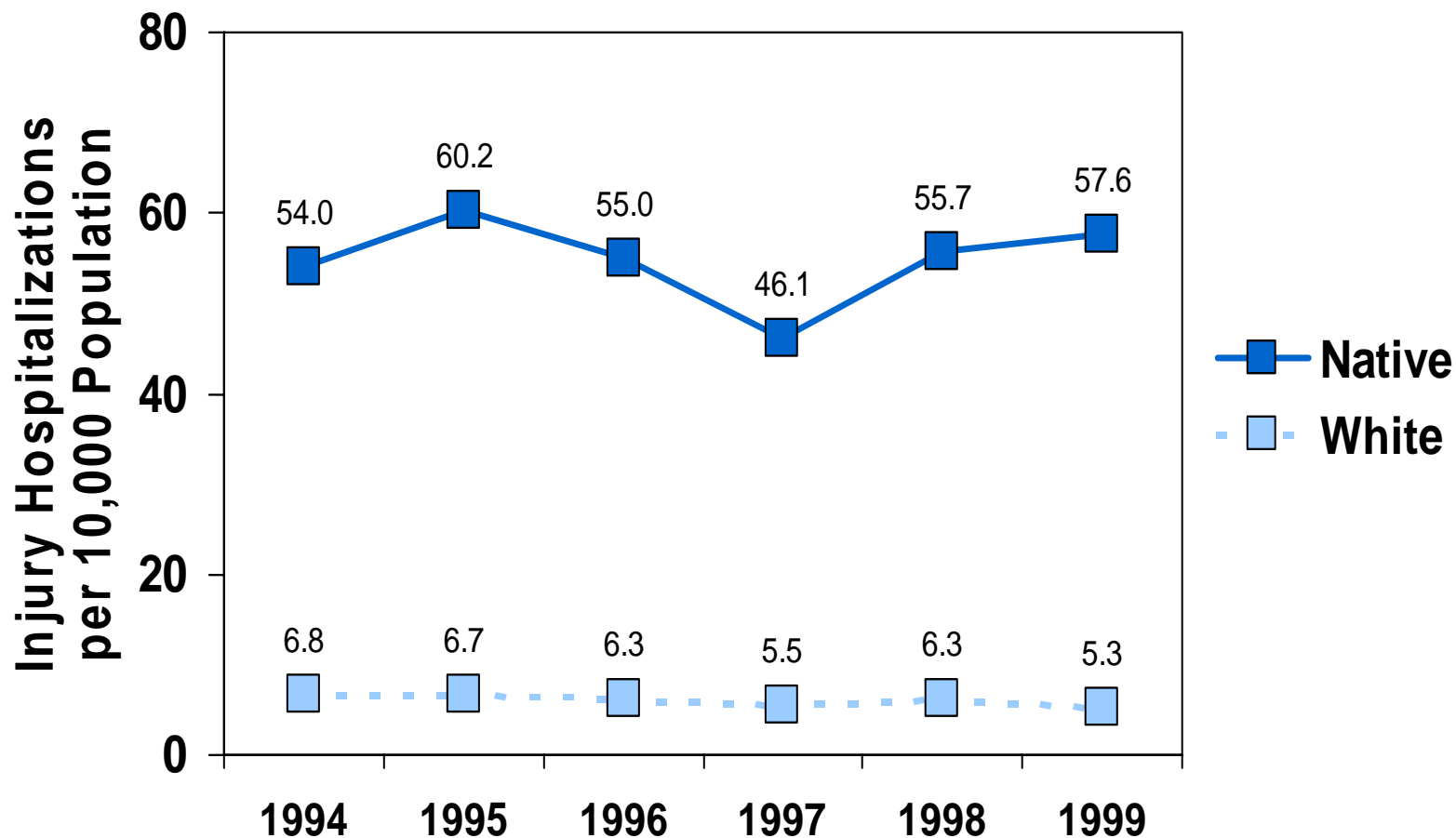


Source: DHSS/CHEMS, AK Trauma
Registry

Assault Hospitalizations and Hospitalization Rates by Region and Year, Rural:Urban Rate Ratios and Rural-Urban Rate Differences: ***Women 20-44, 1994-1999***

Year	Rural Rate	Rural Hospitalizations	Urban Rate	Urban Hospitalizations	Rate Ratio (R:U)	Rate Difference (R-U)
1994	7.2	32	2.0	16	3.6	5.2
1995	8.4	37	3.0	23	2.8	5.4
1996	5.5	24	4.1	31	1.4	1.4
1997	6.6	28	4.0	30	1.6	2.5
1998	4.5	19	3.4	25	1.3	1.1
1999	8.7	36	4.0	29	2.2	4.7

Trends in Assault Hospitalization Rates: Racial Disparities among **Men 20-44** Alaska Residents, 1994-1999

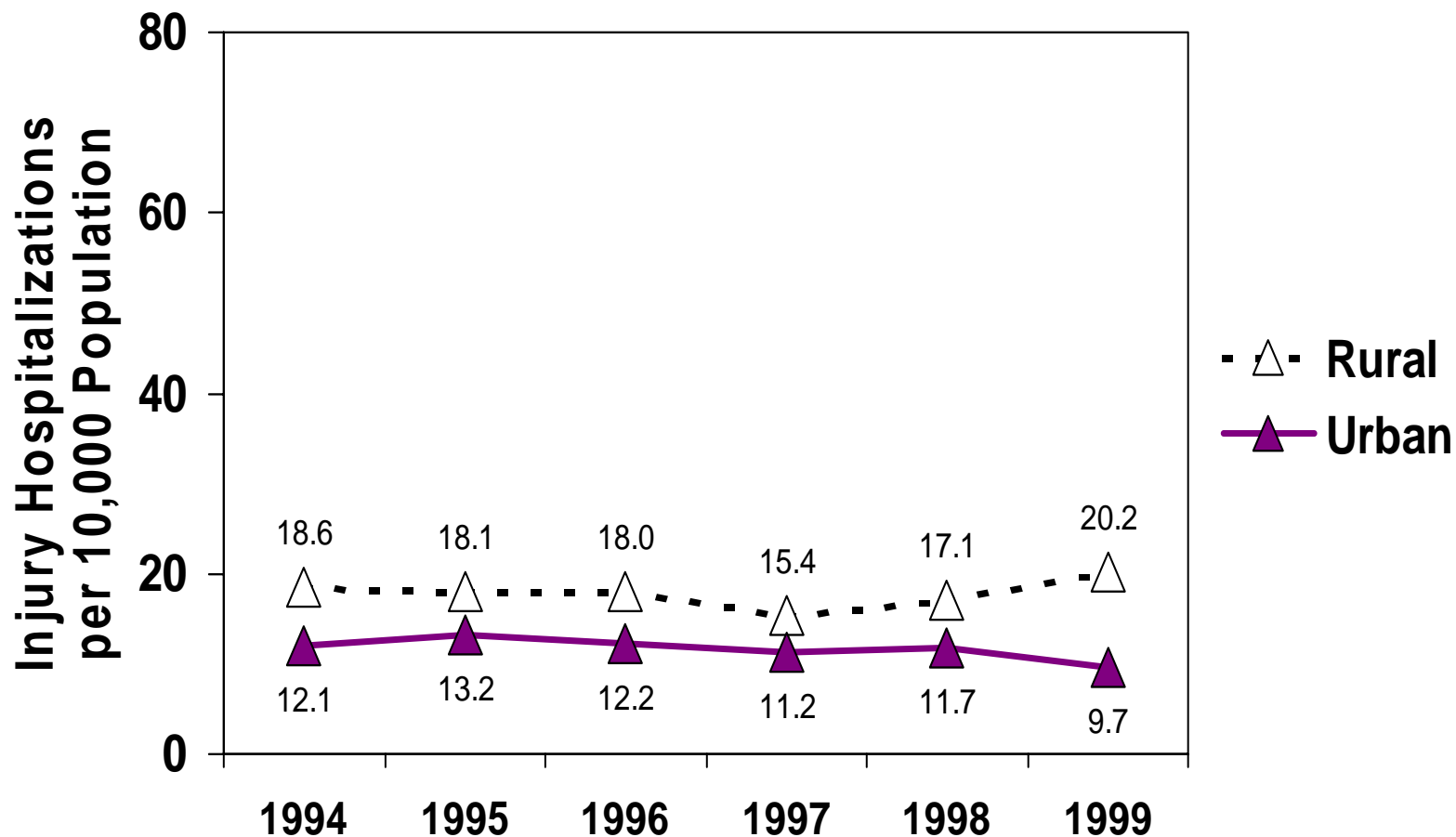


Source: DHSS/CHEMS, AK Trauma
Registry

Assault Hospitalizations and Hospitalization Rates by Race and Year, Native:White Rate Ratios and Native-White Rate Differences: ***Men 20-44, 1994-1999***

Year	Native Rate	Native Hospitalizations	White Rate	White Hospitalizations	Rate Ratio (N:W)	Rate Difference (N-W)
1994	54.0	96	6.8	72	8.0	47.2
1995	60.2	108	6.7	69	9.0	53.5
1996	55.0	99	6.3	63	8.7	48.7
1997	46.1	84	5.5	53	8.4	40.6
1998	55.7	102	6.3	60	8.8	49.3
1999	57.6	106	5.3	49	10.9	52.3

Trends in Assault Hospitalization Rates: Regional Disparities among **Men 20-44** Alaska Residents, 1994-1999

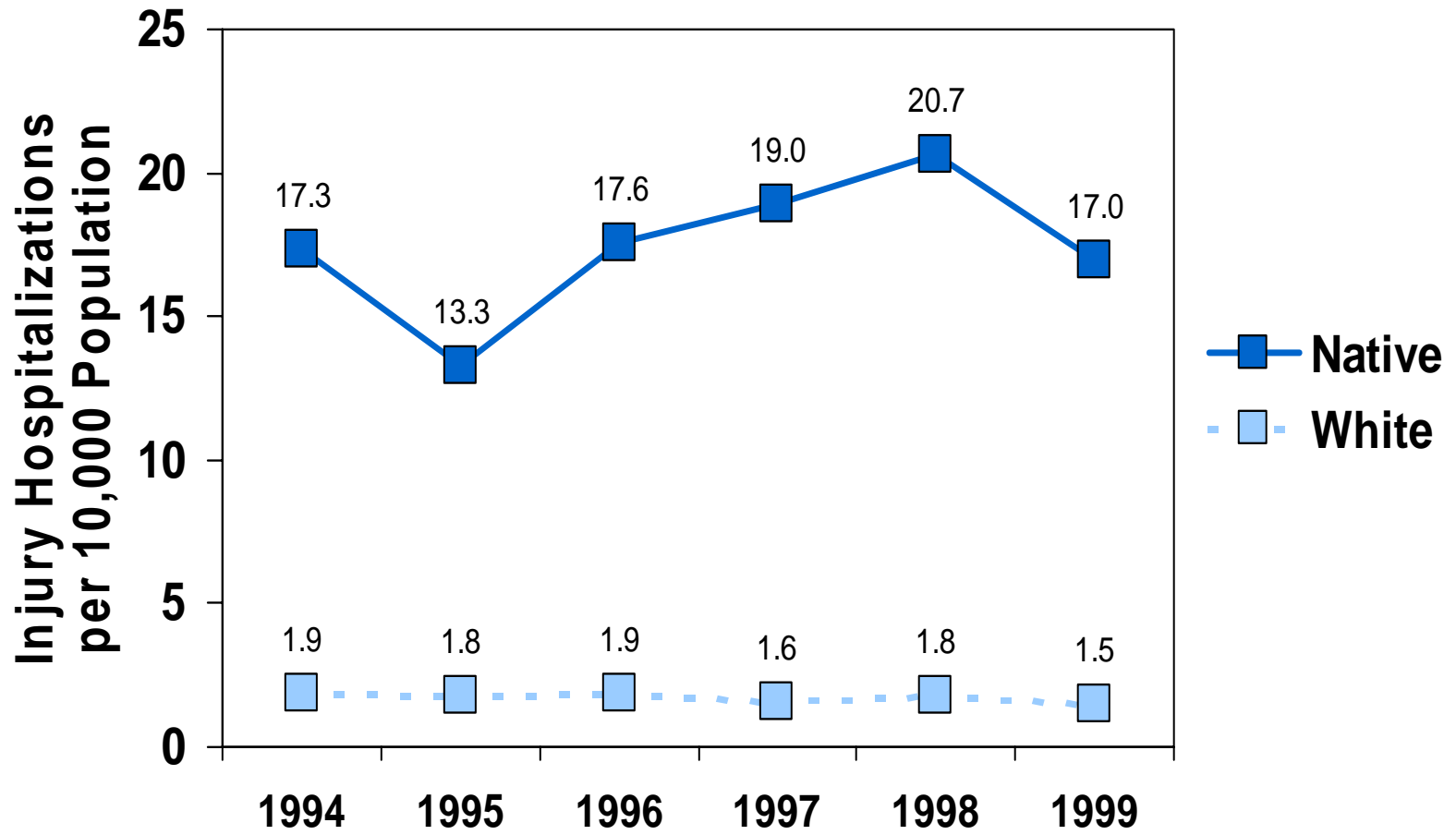


Source: DHSS/CHEMS, AK Trauma
Registry

Assault Hospitalizations and Hospitalization Rates by Region and Year, Rural:Urban Rate Ratios and Rural-Urban Rate Differences: ***Men 20-44, 1994-1999***

Year	Rural Rate	Rural Hospitalizations	Urban Rate	Urban Hospitalizations	Rate Ratio (R:U)	Rate Difference (R-U)
1994	18.6	95	12.1	105	1.5	6.5
1995	18.1	90	13.2	111	1.4	4.9
1996	18.0	88	12.2	101	1.5	5.8
1997	15.4	74	11.2	91	1.4	4.2
1998	17.1	81	11.7	93	1.5	5.4
1999	20.2	94	9.7	76	2.1	10.5

Trends in Assault Hospitalization Rates: Racial Disparities among **Adults 45+** Alaska Residents, 1994-1999

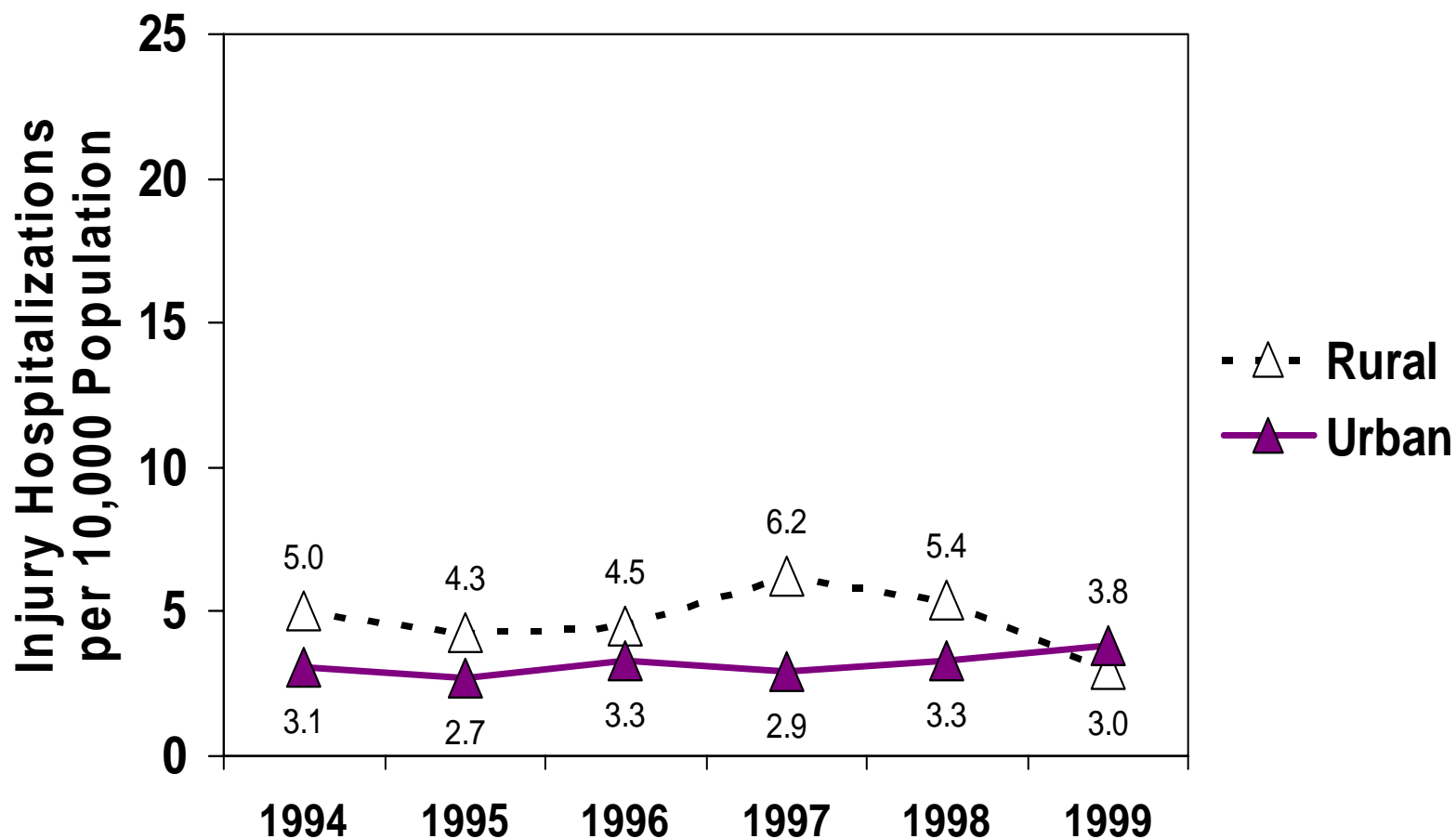


Source: DHSS/CHEMS, AK Trauma
Registry

Assault Hospitalizations and Hospitalization Rates by Race and Year, Native:White Rate Ratios and Native-White Rate Differences: ***Adults 45+, 1994-1999***

Year	Native Rate	Native Hospitalizations	White Rate	White Hospitalizations	Rate Ratio (N:W)	Rate Difference (N-W)
1994	17.3	30	1.9	20	9.3	15.5
1995	13.3	24	1.8	20	7.5	11.5
1996	17.6	33	1.9	22	9.5	15.7
1997	19.0	37	1.6	20	11.8	17.3
1998	20.7	42	1.8	24	11.3	18.8
1999	17.0	36	1.5	21	11.2	15.5

Trends in Assault Hospitalization Rates: Regional Disparities among **Adults 45+** Alaska Residents, 1994-1999



Source: DHSS/CHEMS, AK Trauma
Registry

Assault Hospitalizations and Hospitalization Rates by Region and Year, Rural:Urban Rate Ratios and Rural-Urban Rate Differences: ***Adults 45+, 1994-1999***

Year	Rural Rate	Rural Hospitalizations	Urban Rate	Urban Hospitalizations	Rate Ratio (R:U)	Rate Difference (R-U)
1994	5.0	28	3.1	24	1.6	1.9
1995	4.3	25	2.7	22	1.6	1.6
1996	4.5	28	3.3	28	1.4	1.3
1997	6.2	40	2.9	26	2.1	3.3
1998	5.4	37	3.3	31	1.7	2.2
1999	3.0	22	3.8	38	0.8	-0.8

Summary: Trends in Assault Hospitalization Disparities

- ✓ Racial disparities in rates of hospitalization for assault-related injuries persisted over the 6 years among all age groups, and increased among youth 0-19.
- ✓ Regional disparities were small relative to racial disparities over the 6-year period.

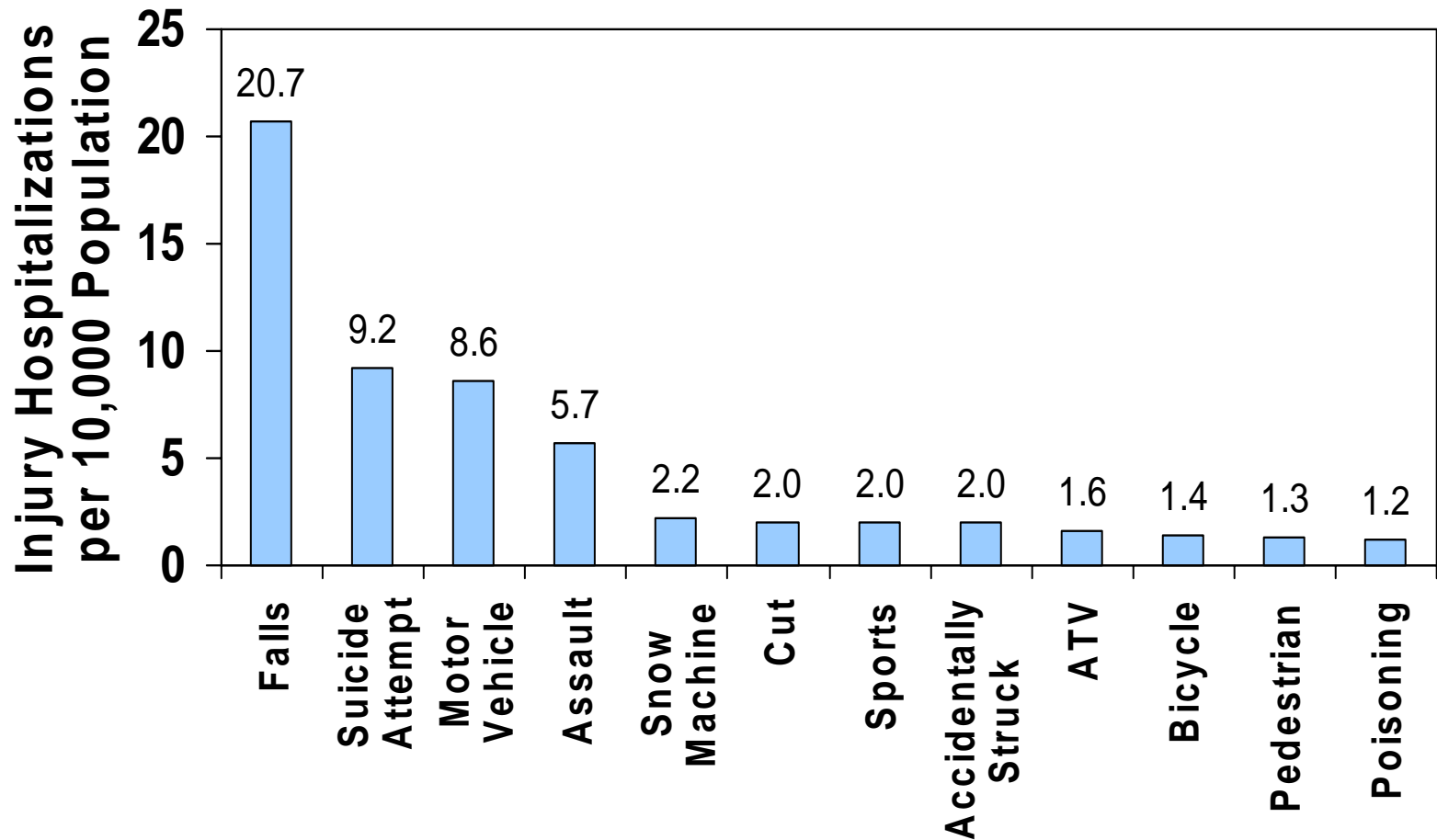
Disparities in Injury Hospitalization Rates by Specific Cause Alaska, 1994-1999

Age-Specific Rates, Rate Ratios
and Rate Differences

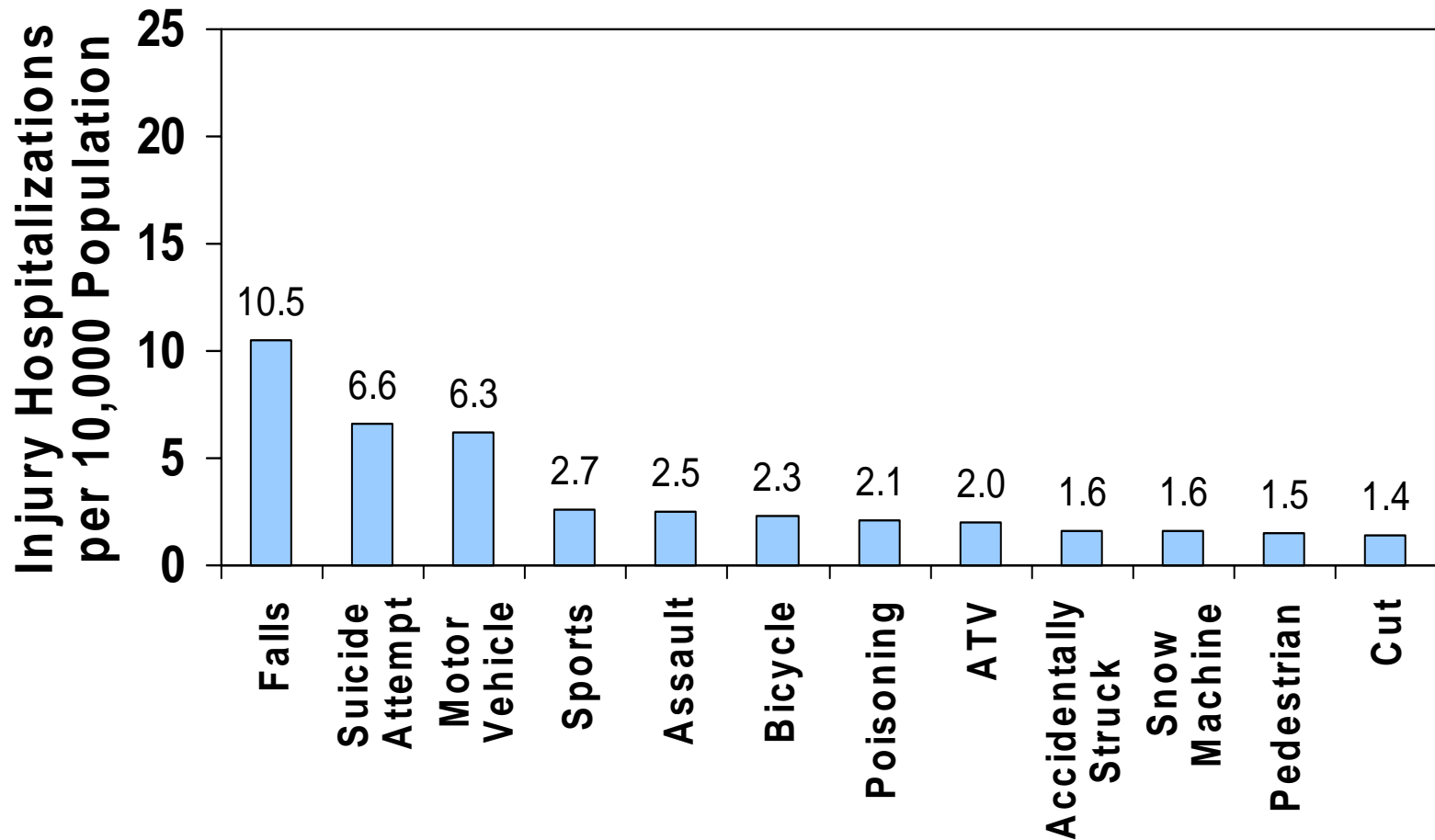
with focus on Youth (0-19), Women and Men 20-44,
and Older Adults (45 and older)

Note: limited to top 12 causes of injury hospitalization for entire population

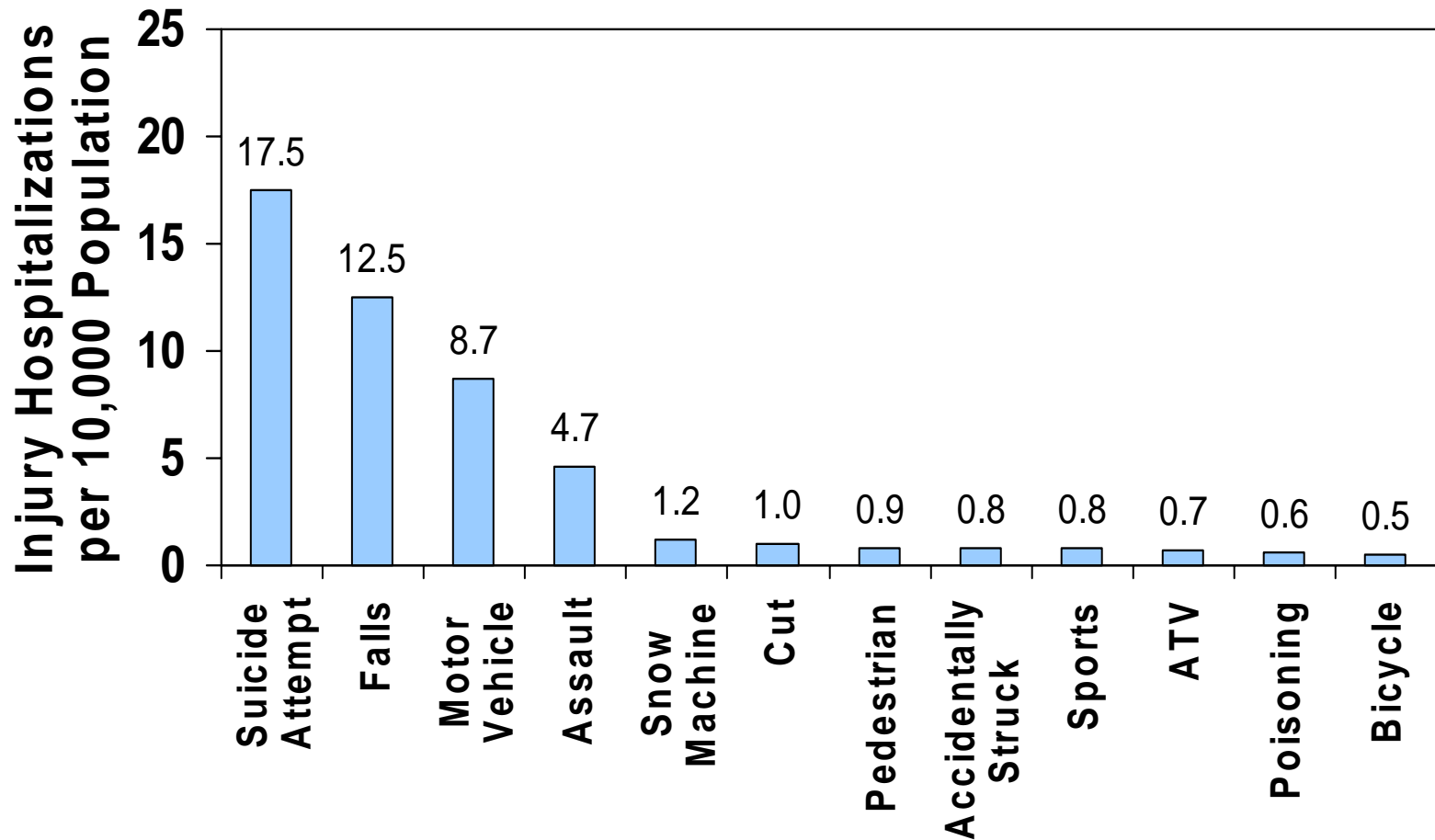
Injury Hospitalization Rates by Cause: *All Groups, 1994-1999*



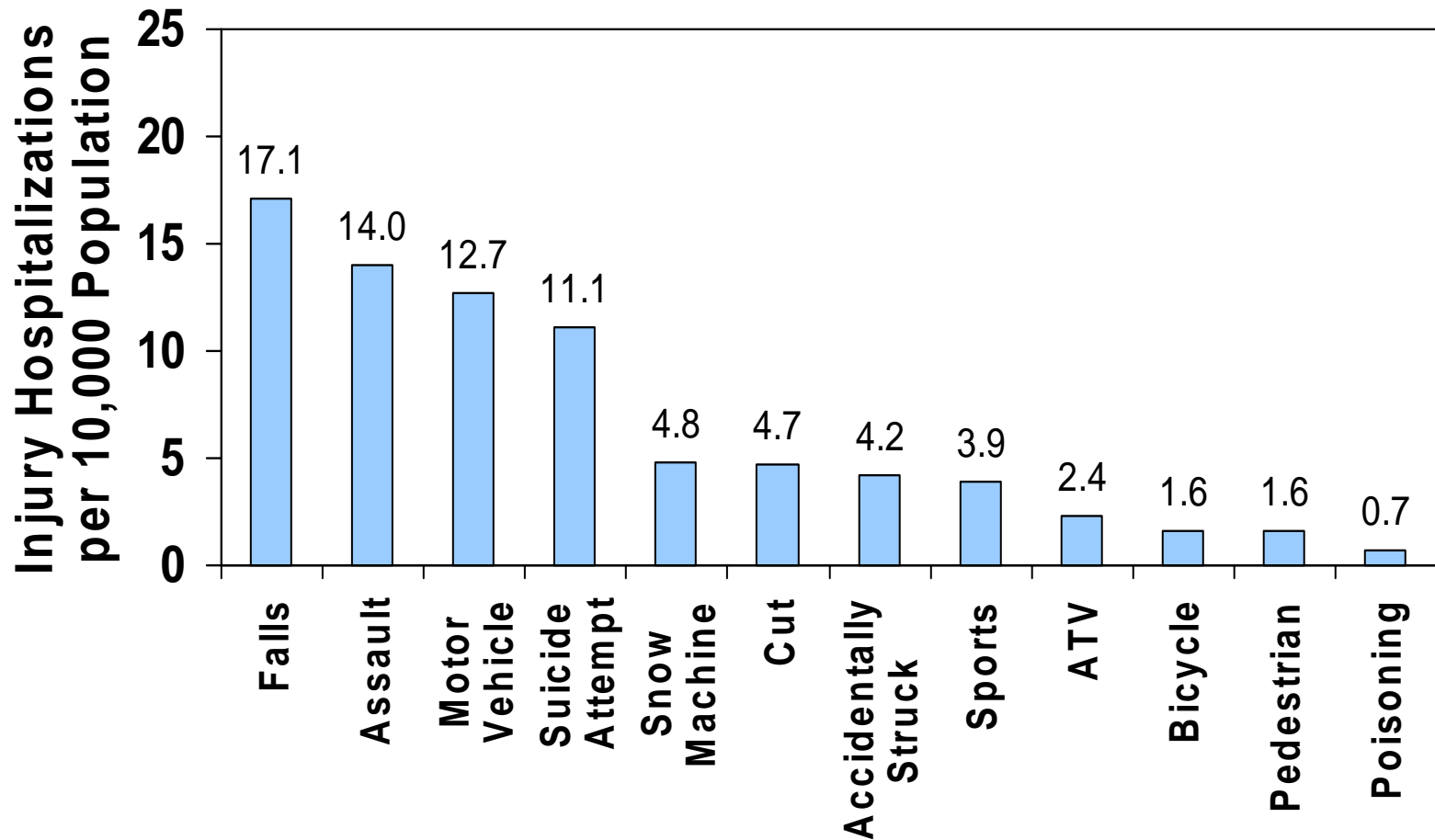
Injury Hospitalization Rates by Specific Cause: *Youth 0-19, 1994-1999*



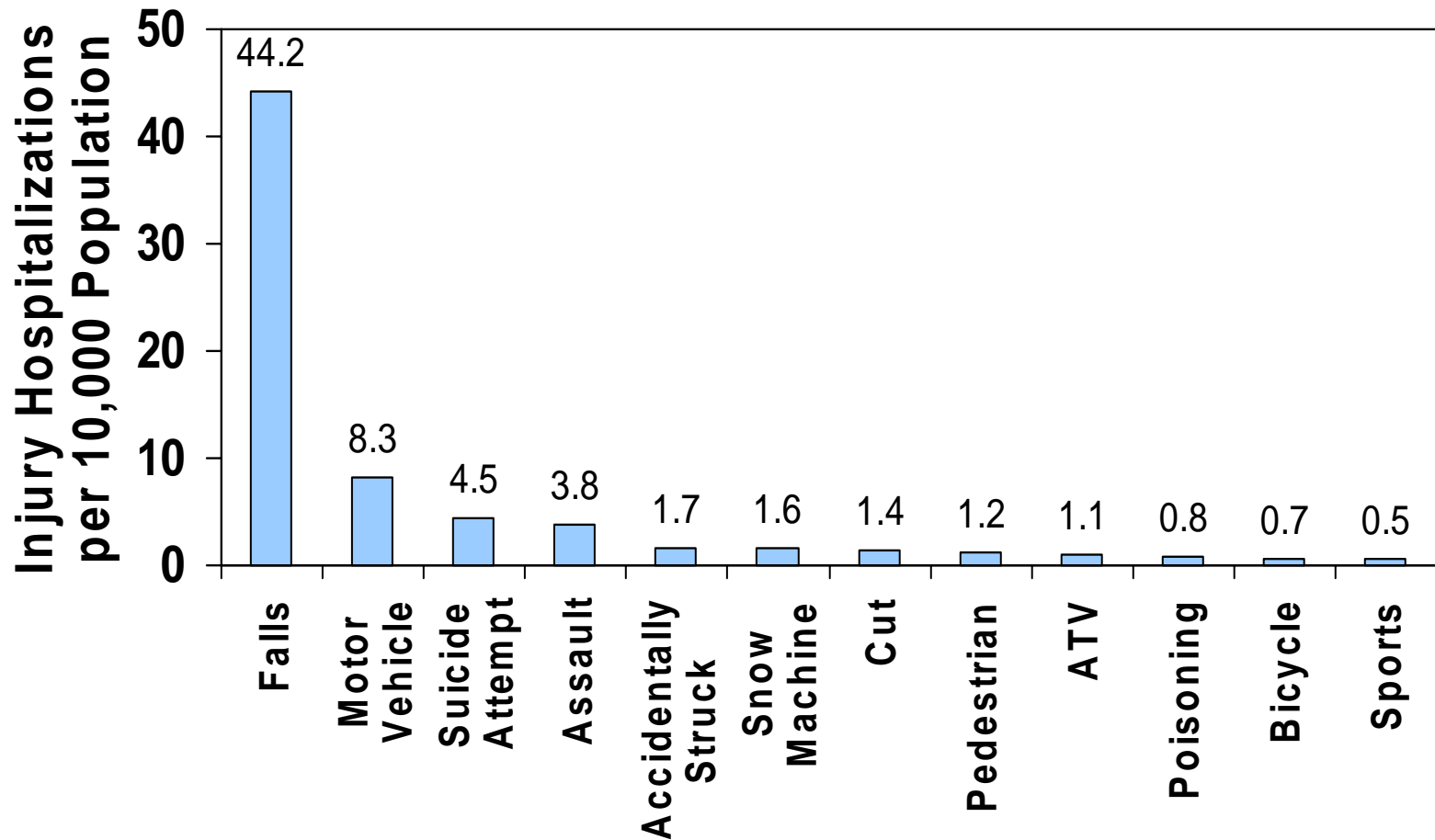
Injury Hospitalization Rates by Specific Cause: *Women 20-44, 1994-1999*



Injury Hospitalization Rates by Specific Cause: *Men 20-44, 1994-1999*

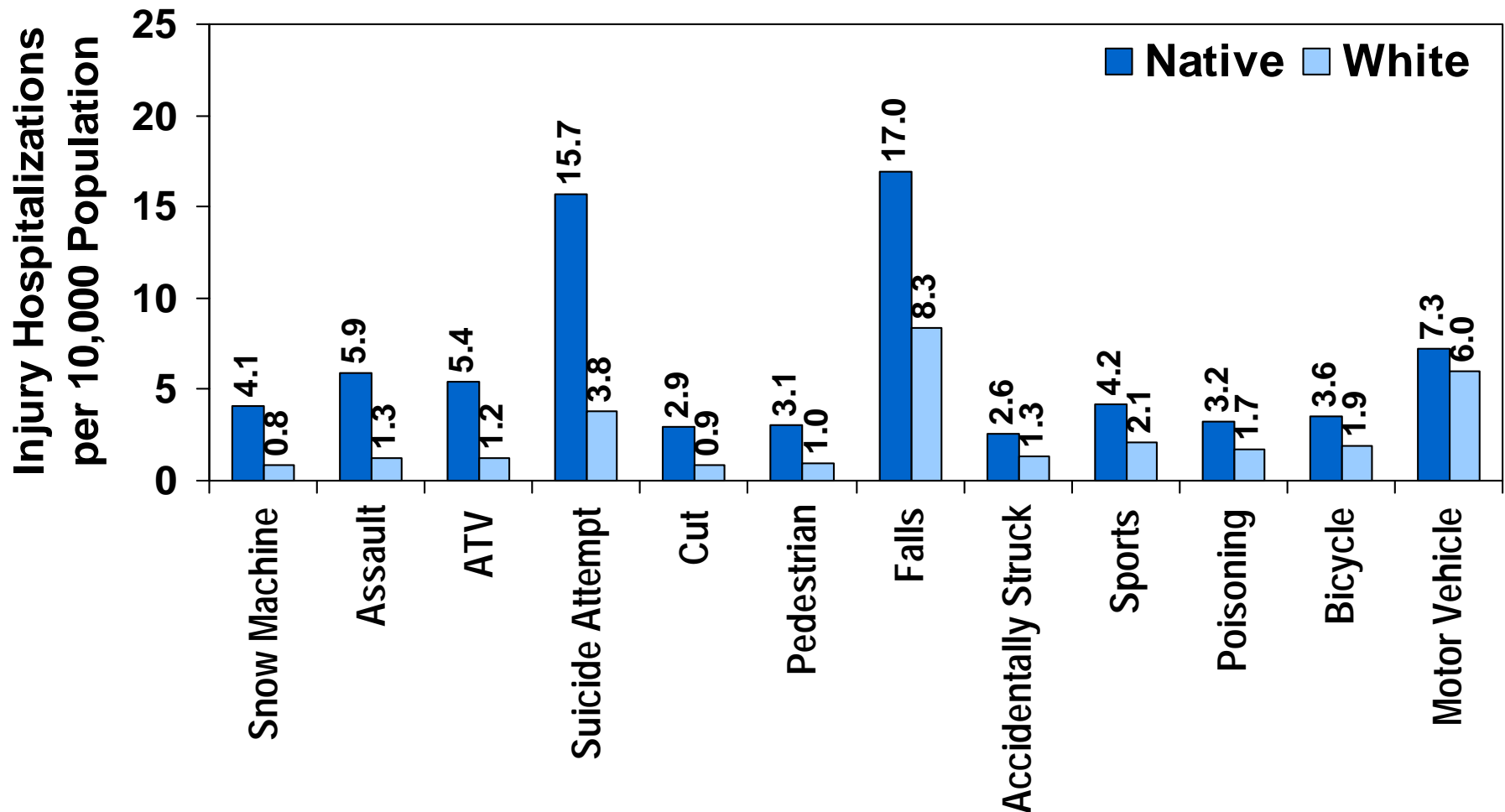


Injury Hospitalization Rates by Specific Cause: *Adults 45+, 1994-1999*



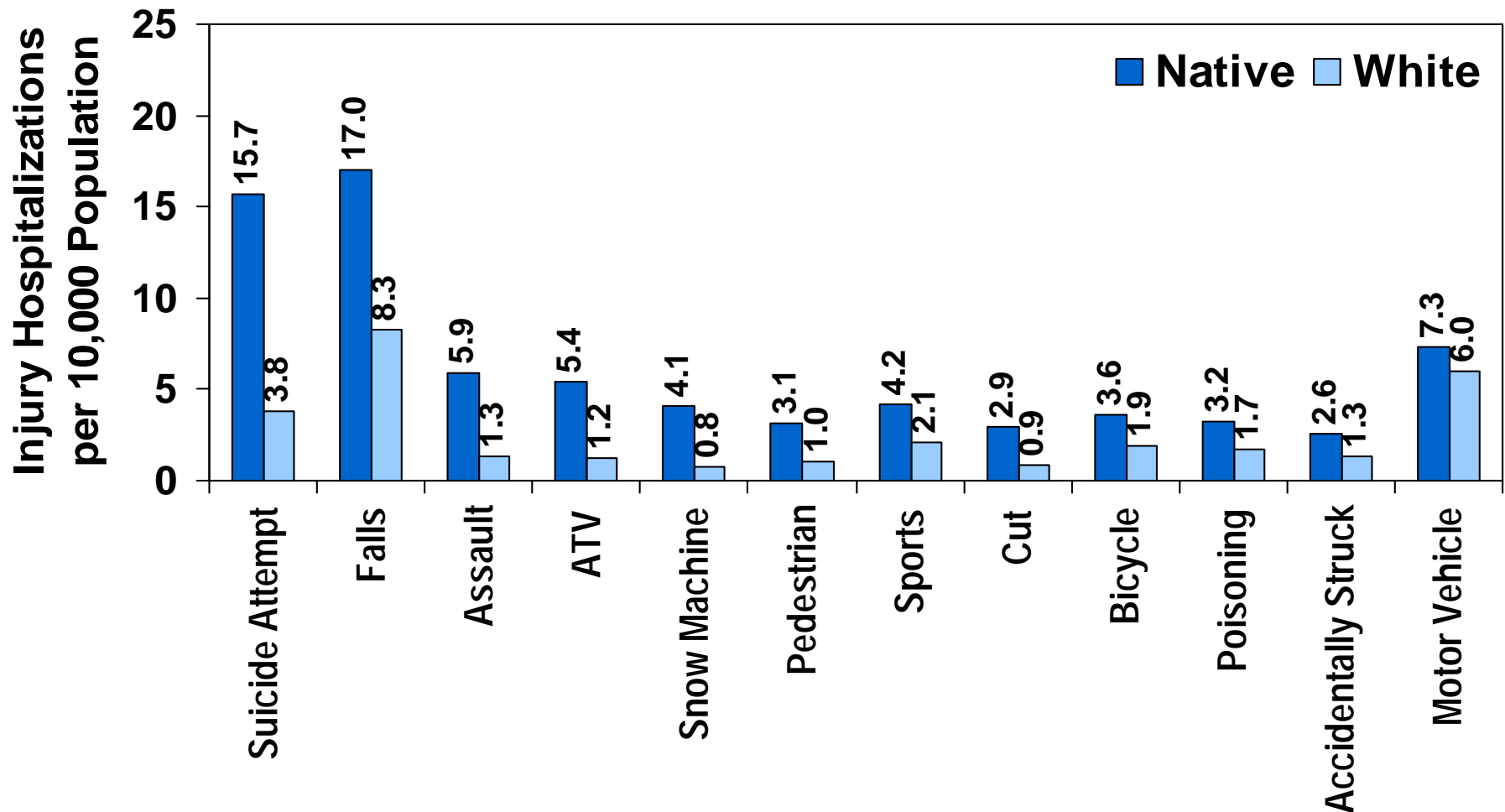
Injury Hospitalization Rates by Race and Cause: *Youth 0-19, 1994-1999*

(Ordered from highest (left) to lowest Native-to-White Rate Ratio)



Injury Hospitalization Rates by Race and Cause: *Youth 0-19, 1994-1999*

(Ordered from highest (left) to lowest Native-to-White Rate Difference)

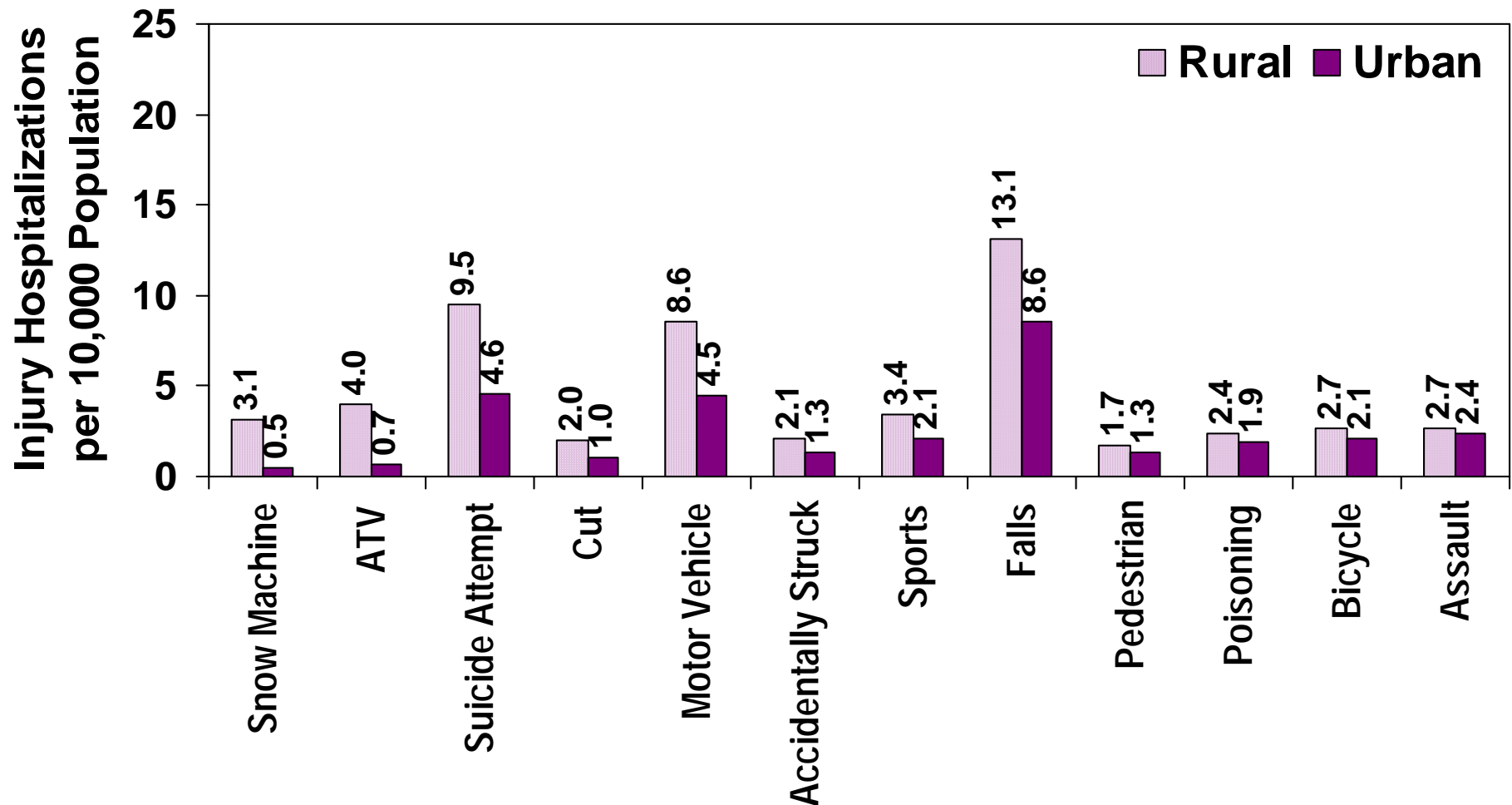


Injury Hospitalization Rates by Race and Cause, Native:White Rate Ratios and Native-White Rate Differences: **Youth 0-19**, 1994-1999

Cause	Native		White		Rate Ratio (N:W)	Rate Difference (N-W)
	Count	Rate	Count	Rate		
Falls	462	17.0	718	8.3	2.0	8.6
Suicide Attempt	428	15.7	327	3.8	4.1	11.9
Motor Vehicle	198	7.3	517	6.0	1.2	1.3
Assault	160	5.9	110	1.3	4.6	4.6
ATV	148	5.4	103	1.2	4.6	4.2
Sports	113	4.2	181	2.1	2.0	2.1
Snow Machine	112	4.1	71	0.8	5.0	3.3
Bicycle	97	3.6	164	1.9	1.9	1.7
Poisoning	88	3.2	147	1.7	1.9	1.5
Pedestrian	83	3.1	83	1.0	3.2	2.1
Cut	80	2.9	77	0.9	3.3	2.1
Accidentally Struck	71	2.6	112	1.3	2.0	1.3

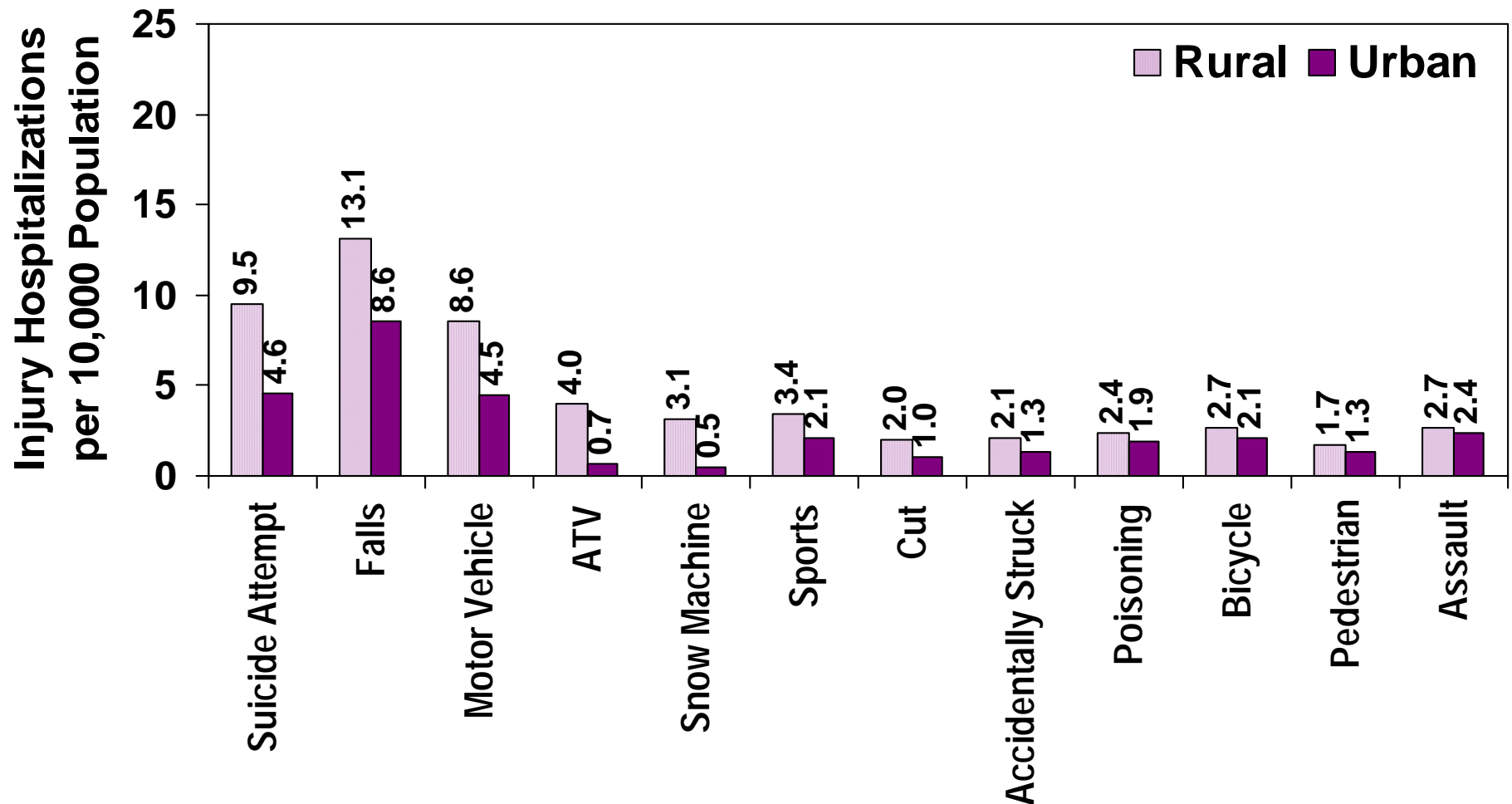
Injury Hospitalization Rates by Region and Cause: *Youth 0-19, 1994-1999*

(Ordered from highest (left) to lowest Rural-to-Urban Rate Ratio)



Injury Hospitalization Rates by Region and Cause: *Youth 0-19, 1994-1999*

(Ordered from highest (left) to lowest Rural-to-Urban Rate Difference)



Injury Hospitalization Rates by Region and Cause, Rural:Urban Rate Ratios and Rural-Urban Rate Differences: **Youth 0-19**, 1994-1999

Cause	Rural		Urban		Rate Ratio (R:U)	Rate Difference (R-U)
	Count	Rate	Count	Rate		
Falls	686	13.1	625	8.6	1.5	4.5
Suicide Attempt	499	9.5	332	4.6	2.1	5.0
Motor Vehicle	453	8.6	328	4.5	1.9	4.1
ATV	208	4.0	47	0.7	6.1	3.3
Sports	176	3.4	156	2.1	1.6	1.2
Snow Machine	161	3.1	35	0.5	6.4	2.6
Assault	140	2.7	171	2.4	1.1	0.3
Bicycle	139	2.7	150	2.1	1.3	0.6
Poisoning	128	2.4	135	1.9	1.3	0.6
Accidentally Struck	110	2.1	92	1.3	1.7	0.8
Cut	102	2.0	71	1.0	2.0	1.0
Pedestrian	90	1.7	95	1.3	1.3	0.4

Causes of Injury with Largest Racial Disparities among Injury Hospitalization Rates, **Youth 0-19**

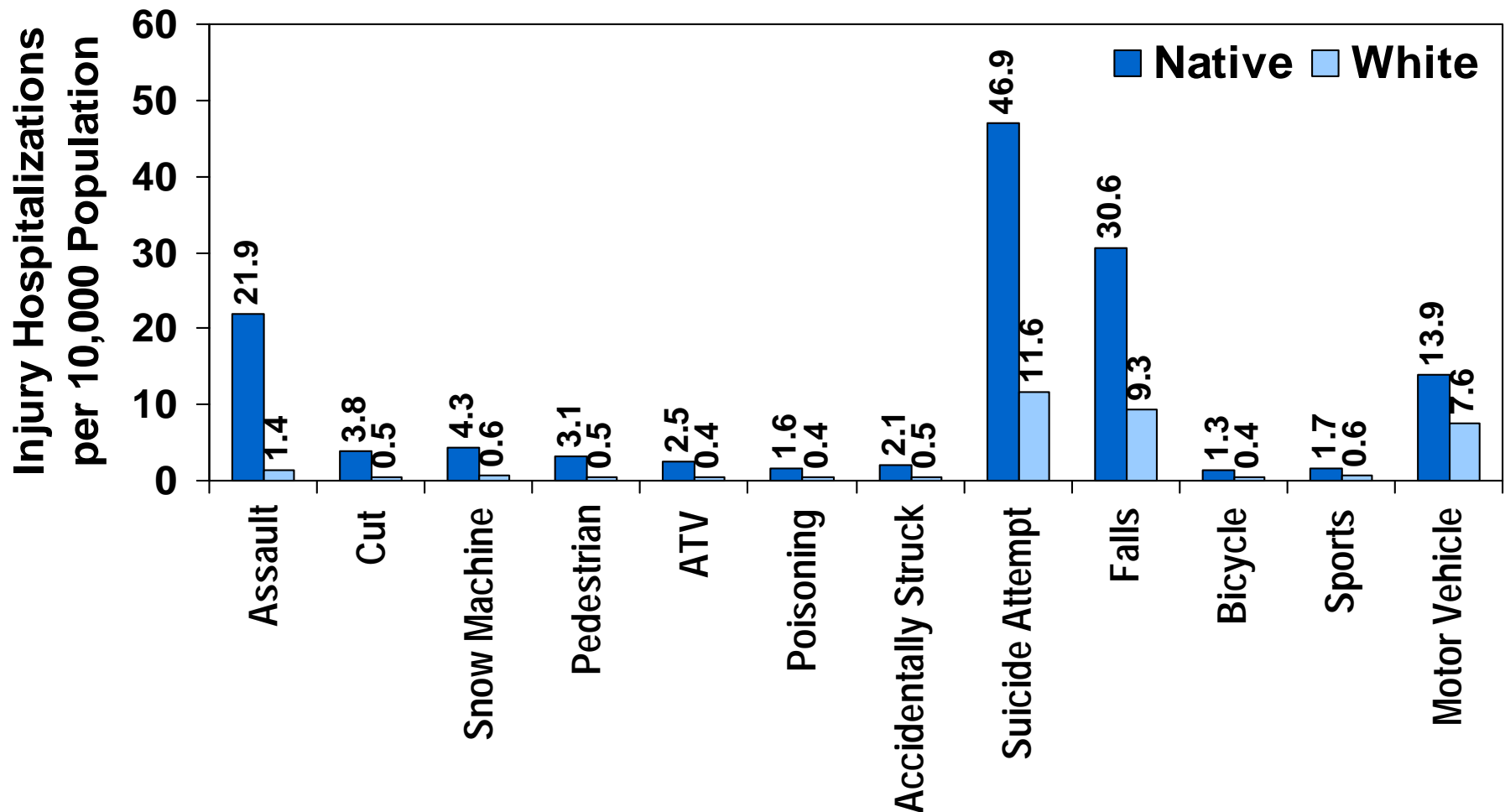
- ✓ Largest Native:White Rate Ratios:
 - ✓ Snow machine
 - ✓ Assault
 - ✓ ATV
 - ✓ Suicide attempt
- ✓ Largest Native:White Rate Differences:
 - ✓ Falls
 - ✓ Suicide attempt
 - ✓ Motor Vehicle
 - ✓ Assault
 - ✓ ATV

Causes of Injury with Largest Regional Disparities among Injury Hospitalization Rates, **Youth 0-19**

- ✓ Largest Rural:Urban Rate Ratios:
 - ✓ Snow machine
 - ✓ ATV
 - ✓ Suicide attempt
- ✓ Largest Rural-Urban Rate Differences:
 - ✓ Suicide attempt
 - ✓ Falls
 - ✓ Motor Vehicle
 - ✓ ATV

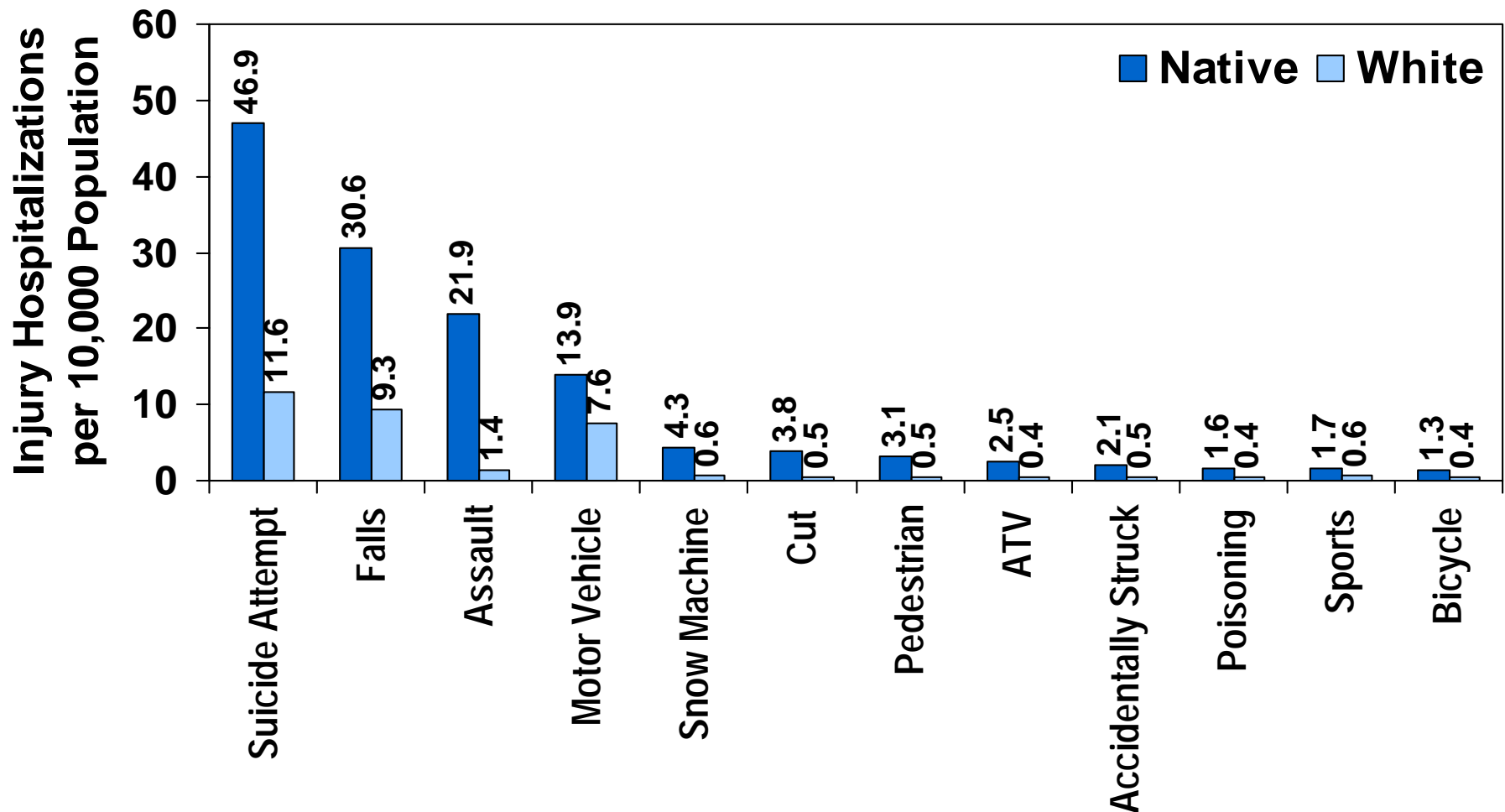
Injury Hospitalization Rates by Race and Cause: ***Women 20-44, 1994-1999***

(Ordered from highest (left) to lowest Native-to-White Rate Ratio)



Injury Hospitalization Rates by Race and Cause: *Women 20-44, 1994-1999*

(Ordered from highest (left) to lowest Native-to-White Rate Difference)

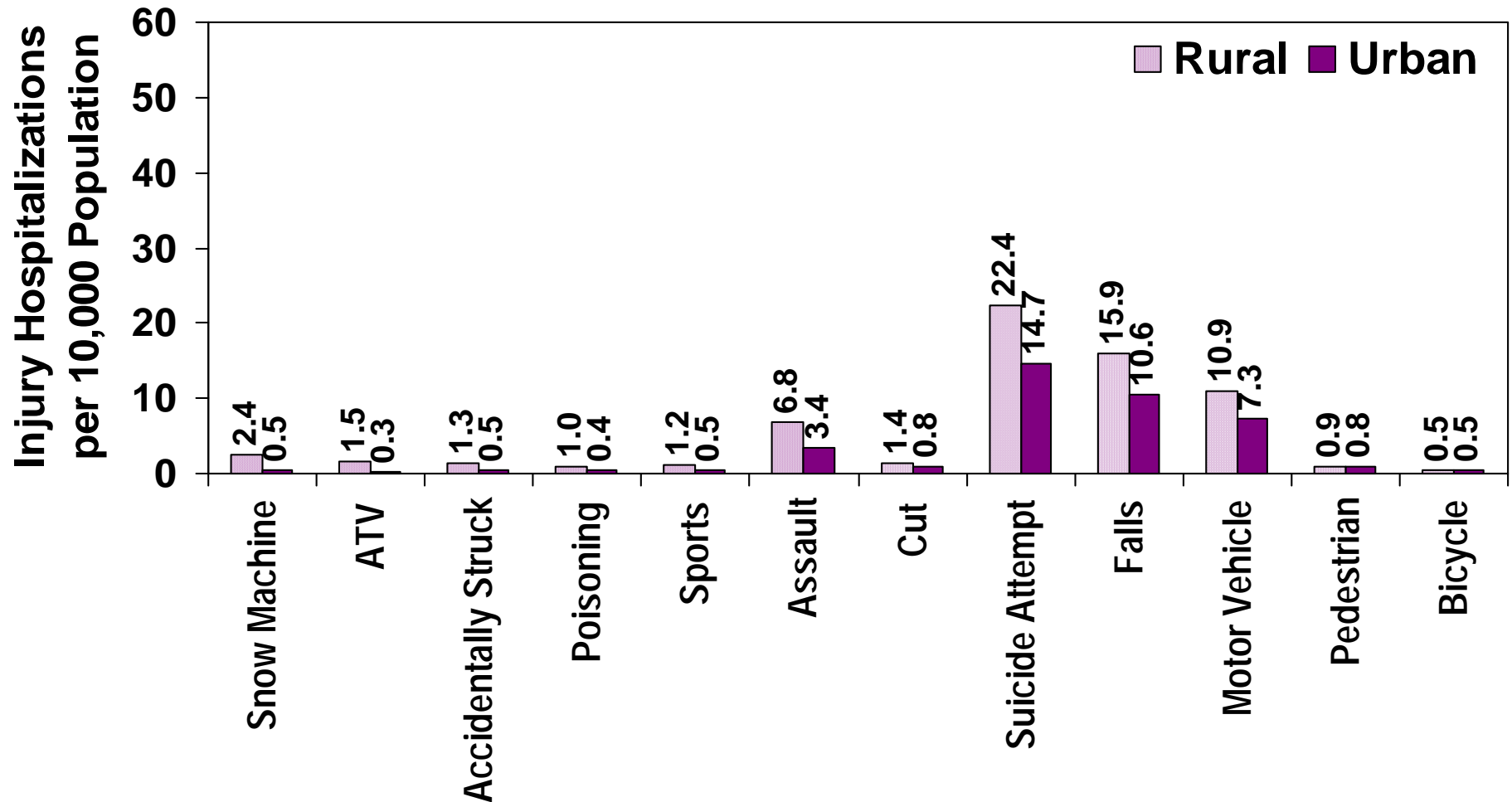


Injury Hospitalization Rates by Race and Cause, Native:White Rate Ratios and Native-White Rate Differences: ***Women 20-44***, 1994-1999

Cause	Native		White		Rate Ratio (N:W)	Rate Difference (N-W)
	Count	Rate	Count	Rate		
Suicide Attempt	504	46.9	619	11.6	4.0	35.3
Falls	329	30.6	494	9.3	3.3	21.3
Assault	235	21.9	72	1.4	16.2	20.5
Motor Vehicle	149	13.9	407	7.6	1.8	6.2
Snow Machine	46	4.3	34	0.6	6.7	3.6
Cut	41	3.8	27	0.5	7.5	3.3
Pedestrian	33	3.1	25	0.5	6.5	2.6
ATV	27	2.5	22	0.4	6.1	2.1
Accidentally Struck	23	2.1	27	0.5	4.2	1.6
Sports	18	1.7	31	0.6	2.9	1.1
Poisoning	17	1.6	19	0.4	4.4	1.2
Bicycle	14	1.3	22	0.4	3.2	0.9

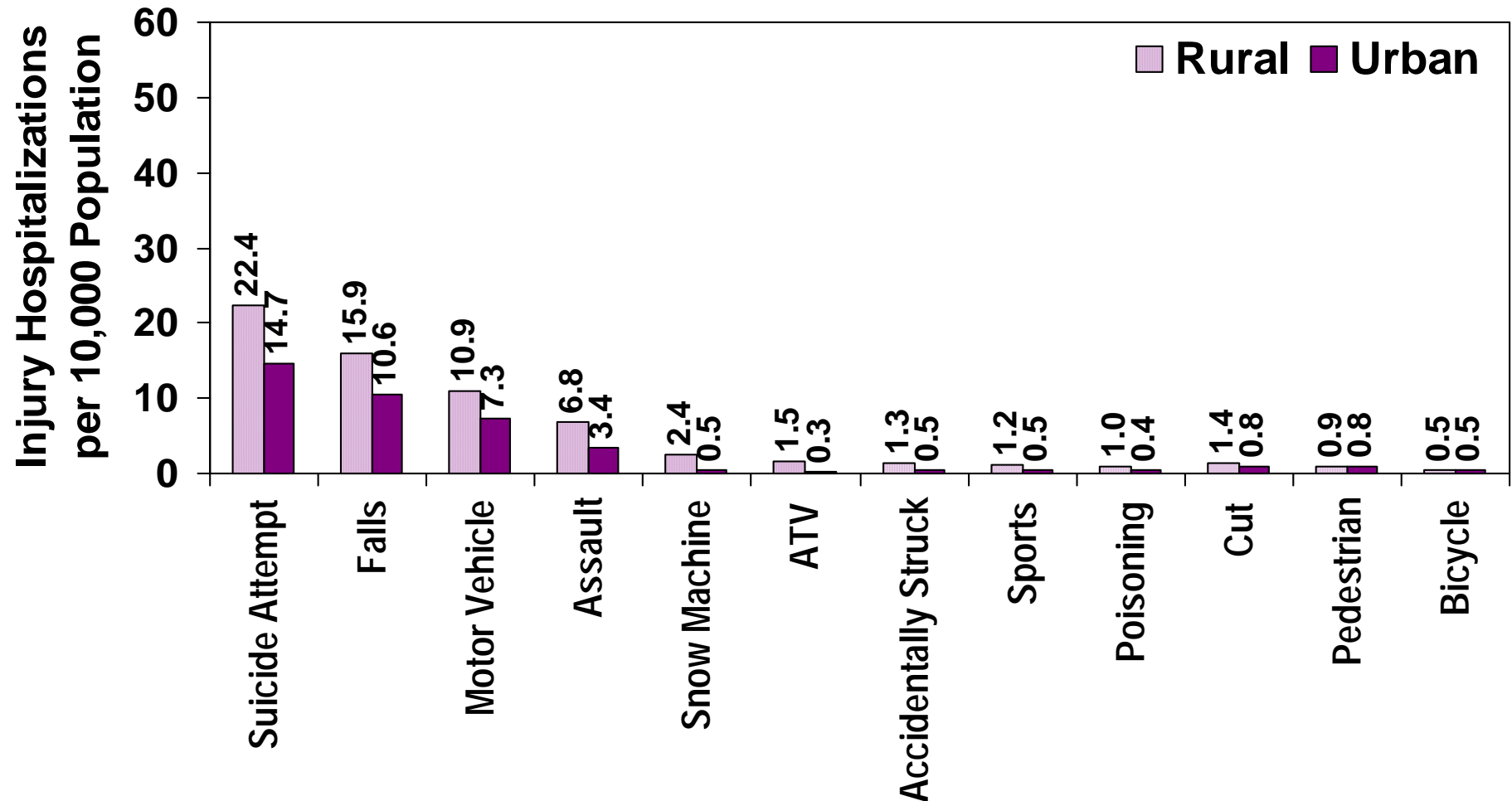
Injury Hospitalization Rates by Region and Cause: ***Women 20-44, 1994-1999***

(Ordered from highest (left) to lowest Rural-to-Urban Rate Ratio)



Injury Hospitalization Rates by Region and Cause: ***Women 20-44, 1994-1999***

(Ordered from highest (left) to lowest Rural-to-Urban Rate Difference)



Injury Hospitalization Rates by Region and Cause, Rural:Urban Rate Ratios and Rural-Urban Rate Differences: **Women 20-44, 1994-1999**

Cause	Rural		Urban		Rate Ratio (R:U)	Rate Difference (R-U)
	Count	Rate	Count	Rate		
Suicide Attempt	577	22.4	664	14.7	1.5	7.7
Falls	410	15.9	478	10.6	1.5	5.3
Motor Vehicle	282	10.9	332	7.3	1.5	3.6
Assault	176	6.8	154	3.4	2.0	3.4
Snow Machine	61	2.4	21	0.5	5.1	1.9
ATV	38	1.5	13	0.3	5.1	1.2
Cut	35	1.4	38	0.8	1.6	0.5
Accidentally Struck	33	1.3	22	0.5	2.6	0.8
Sports	32	1.2	23	0.5	2.4	0.7
Poisoning	26	1.0	18	0.4	2.5	0.6
Pedestrian	23	0.9	37	0.8	1.1	0.1
Bicycle	13	0.5	24	0.5	0.9	0.0

Causes of Injury with Largest Racial Disparities among Injury Hospitalization Rates, **Women 20-44**

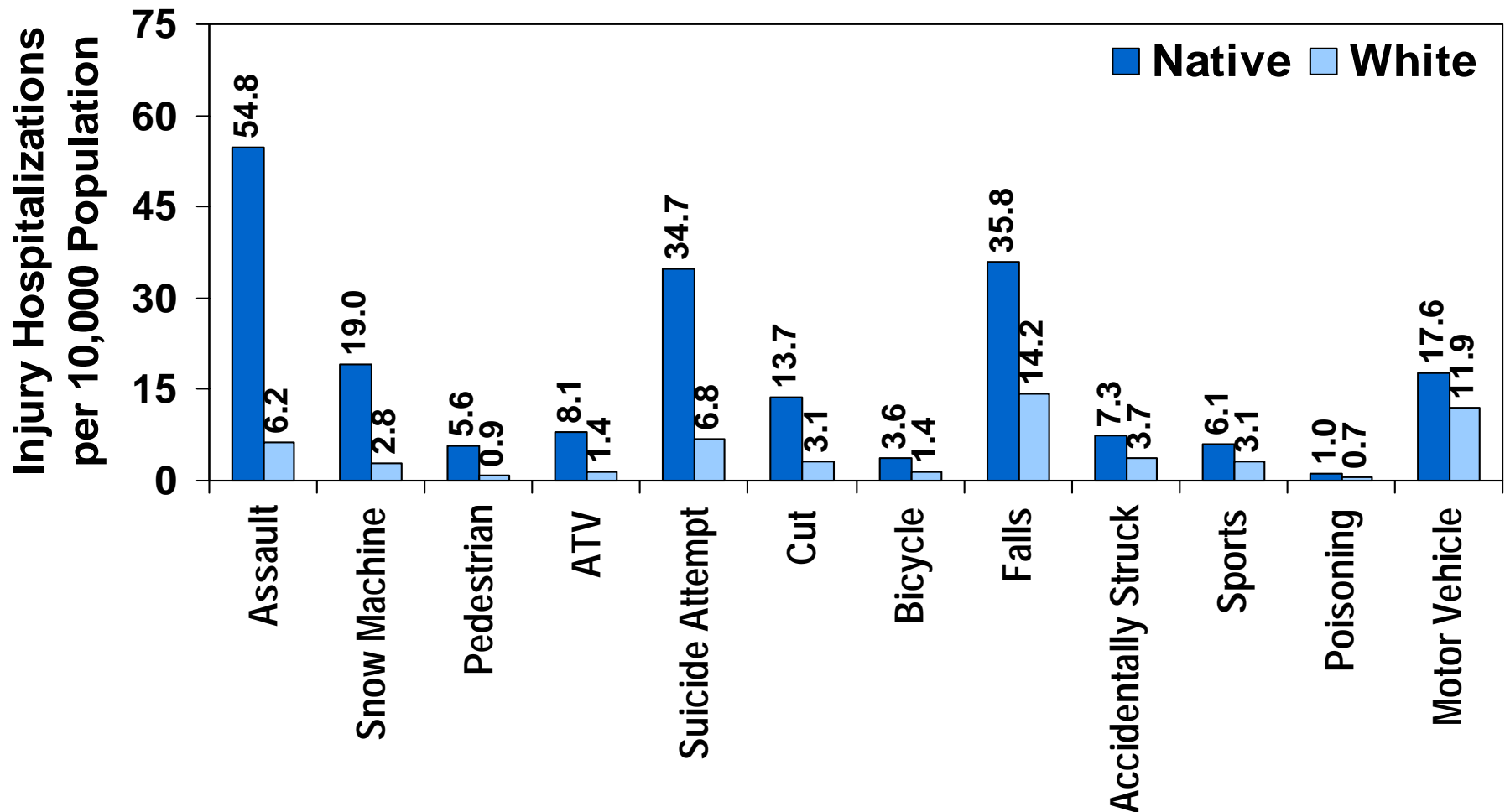
- ✓ Largest Native:White Rate Ratios:
 - ✓ Assault
 - ✓ Cut
 - ✓ Snow Machine
 - ✓ Pedestrian
 - ✓ ATV
- ✓ Largest Native:White Rate Differences:
 - ✓ Suicide attempt
 - ✓ Falls
 - ✓ Assault
 - ✓ Motor Vehicle

Causes of Injury with Largest Regional Disparities among Injury Hospitalization Rates, **Women 20-44**

- ✓ Largest Rural:Urban Rate Ratios:
 - ✓ Snow machine
 - ✓ ATV
- ✓ Largest Rural-Urban Rate Differences:
 - ✓ Suicide attempt
 - ✓ Falls
 - ✓ Motor Vehicle
 - ✓ Assault

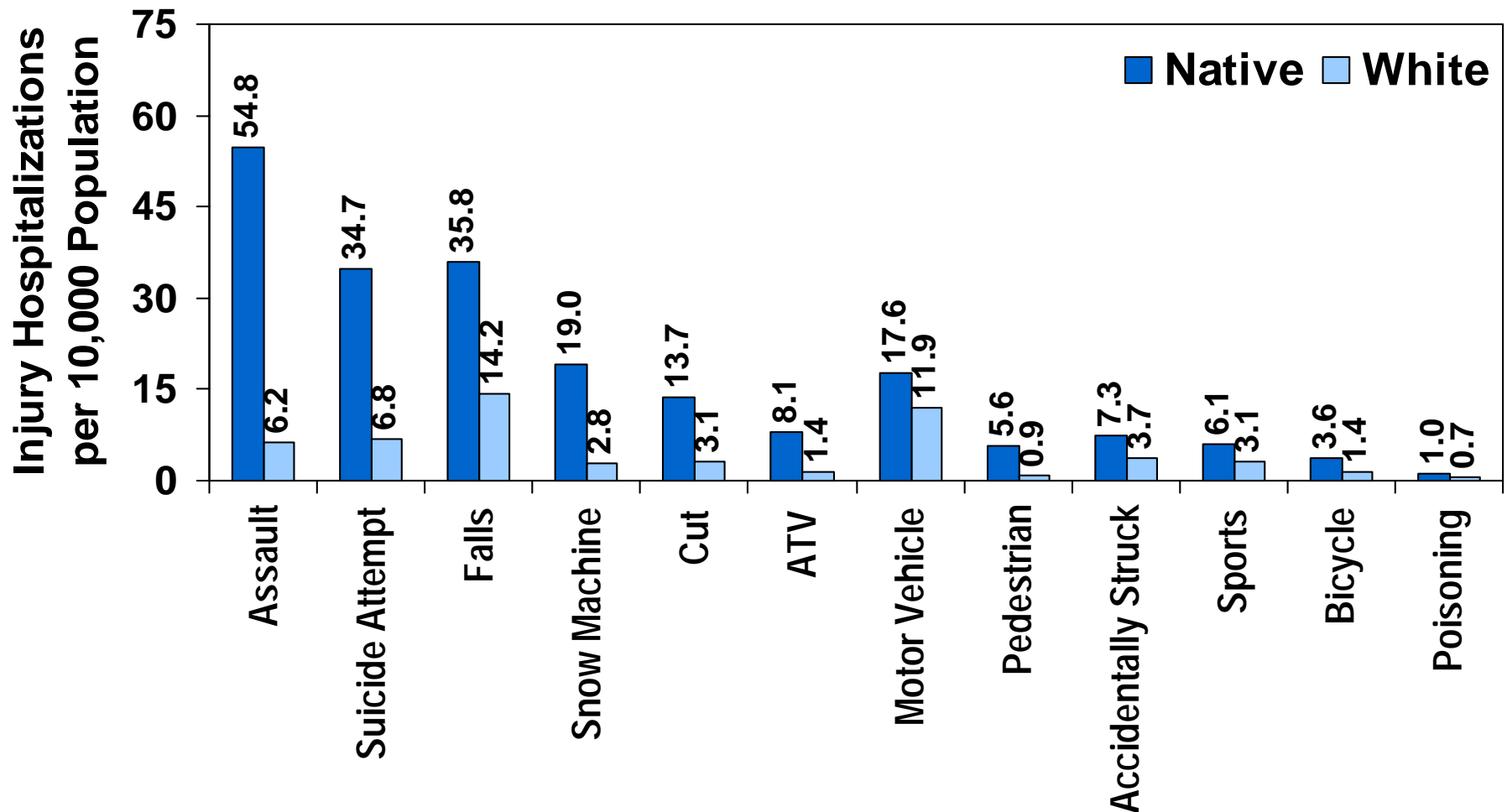
Injury Hospitalization Rates by Race and Cause: *Men 20-44, 1994-1999*

(Ordered from highest (left) to lowest Native-to-White Rate Ratio)



Injury Hospitalization Rates by Race and Cause: *Men 20-44, 1994-1999*

(Ordered from highest (left) to lowest Native-to-White Rate Difference)

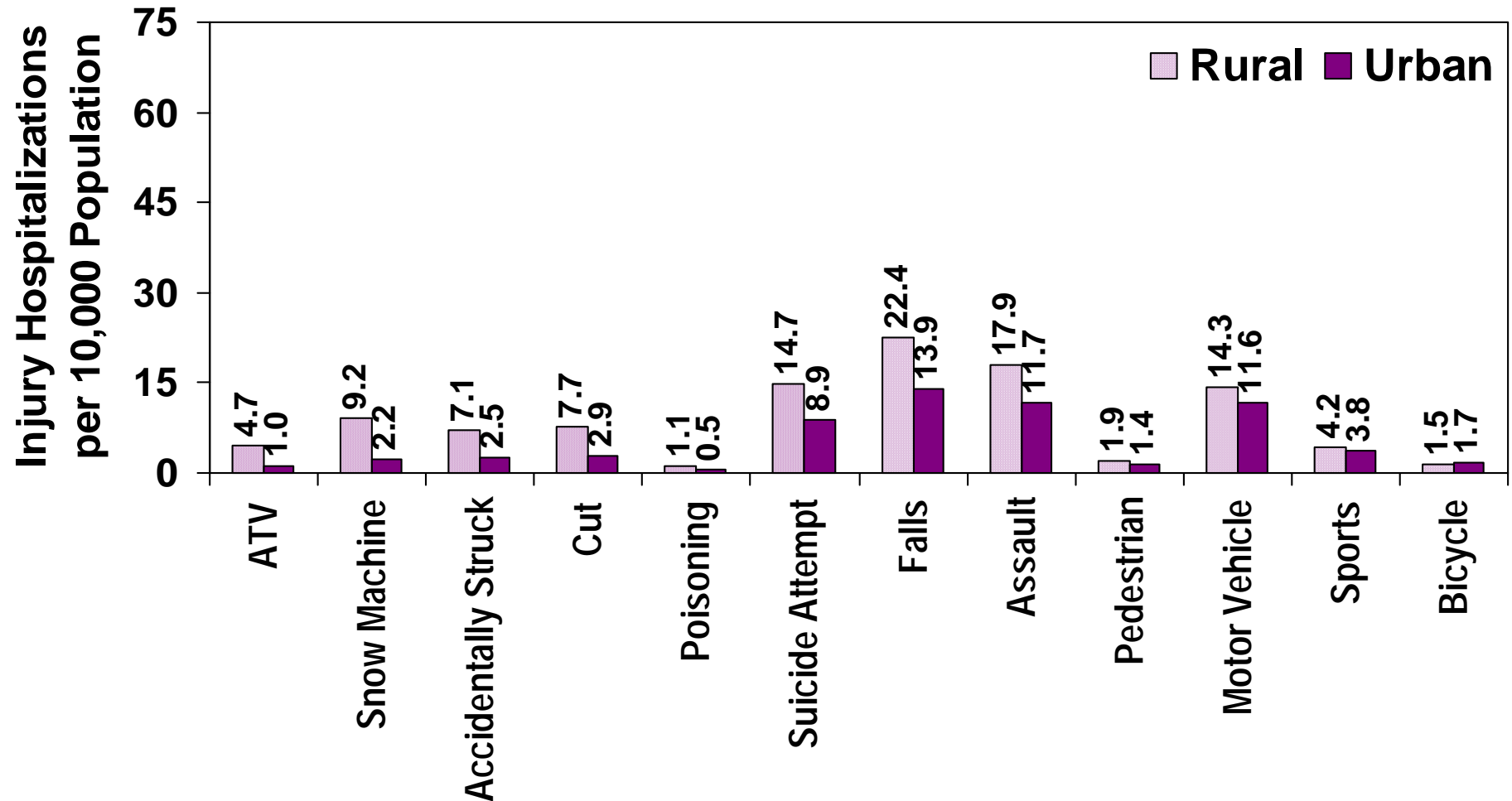


Injury Hospitalization Rates by Race and Cause, Native:White Rate Ratios and Native-White Rate Differences: **Men 20-44, 1994-1999**

Cause	Native		White		Rate Ratio (N:W)	Rate Difference (N-W)
	Count	Rate	Count	Rate		
Assault	595	54.8	366	6.2	8.9	48.6
Falls	389	35.8	842	14.2	2.5	21.6
Suicide Attempt	377	34.7	402	6.8	5.1	27.9
Snow Machine	206	19.0	163	2.8	6.9	16.2
Motor Vehicle	191	17.6	707	11.9	1.5	5.7
Cut	149	13.7	181	3.1	4.5	10.7
ATV	88	8.1	83	1.4	5.8	6.7
Accidentally Struck	79	7.3	220	3.7	2.0	3.6
Sports	66	6.1	186	3.1	1.9	2.9
Pedestrian	61	5.6	56	0.9	6.0	4.7
Bicycle	39	3.6	80	1.4	2.7	2.2
Poisoning	11	1.0	39	0.7	1.5	0.4

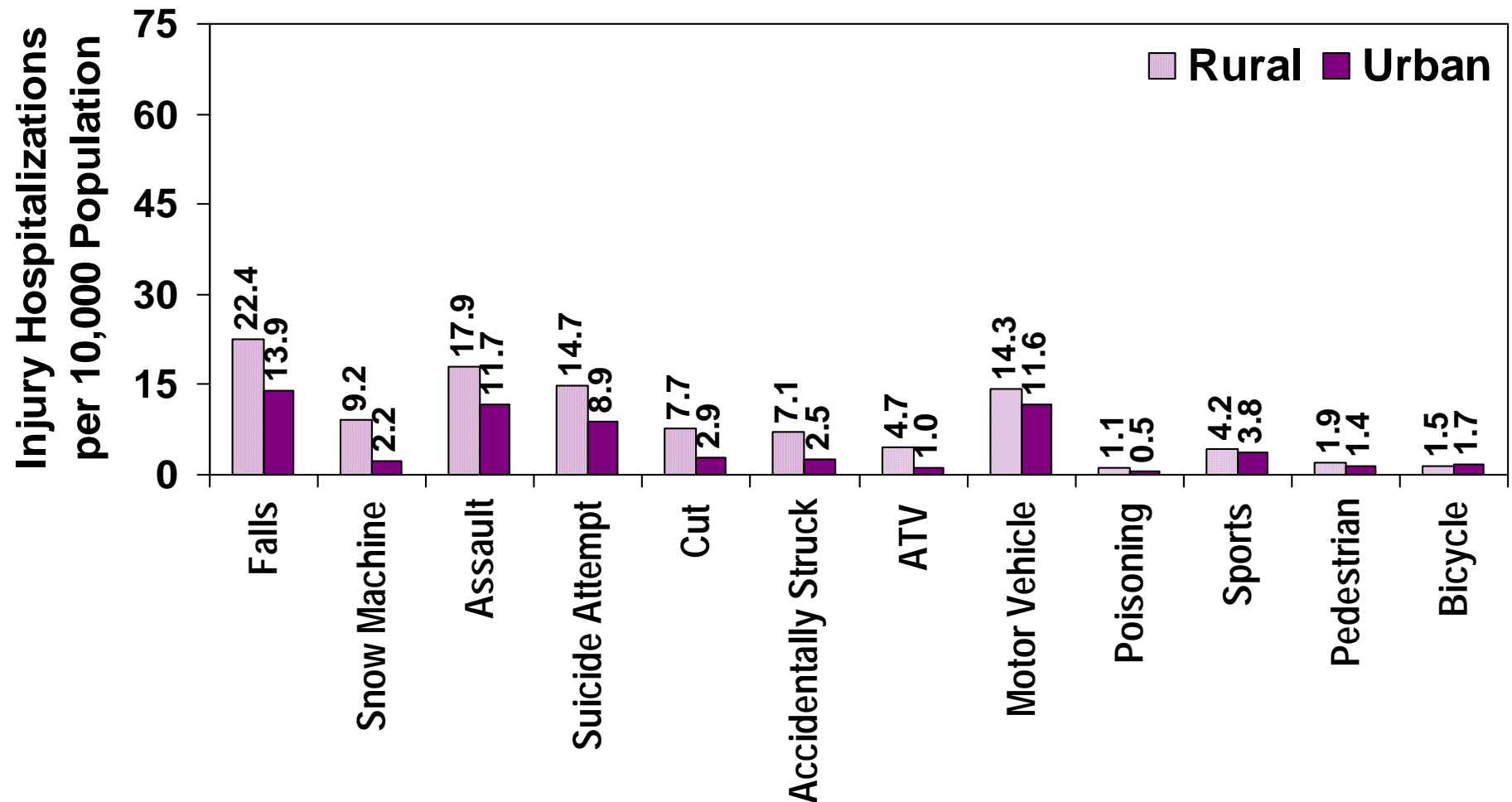
Injury Hospitalization Rates by Region and Cause: *Men 20-44, 1994-1999*

(Ordered from highest (left) to lowest Rural-to-Urban Rate Ratio)



Injury Hospitalization Rates by Region and Cause: *Men 20-44, 1994-1999*

(Ordered from highest (left) to lowest Rural-to-Urban Rate Difference)



Injury Hospitalization Rates by Region and Cause, Rural:Urban Rate Ratios and Rural-Urban Rate Differences: **Men 20-44, 1994-1999**

Cause	Rural		Urban		Rate Ratio (R:U)	Rate Difference (R-U)
	Count	Rate	Count	Rate		
Falls	652	22.4	688	13.9	1.6	8.4
Assault	522	17.9	577	11.7	1.5	6.2
Suicide Attempt	428	14.7	440	8.9	1.6	5.8
Motor Vehicle	418	14.3	573	11.6	1.2	2.7
Snow Machine	269	9.2	110	2.2	4.1	7.0
Cut	224	7.7	144	2.9	2.6	4.8
Accidentally Struck	206	7.1	125	2.5	2.8	4.5
ATV	136	4.7	47	1.0	4.9	3.7
Sports	123	4.2	186	3.8	1.1	0.5
Pedestrian	55	1.9	71	1.4	1.3	0.5
Bicycle	44	1.5	84	1.7	0.9	-0.2
Poisoning	31	1.1	22	0.5	2.4	0.6

Causes of Injury with Largest Racial Disparities among Injury Hospitalization Rates, **Men 20-44**

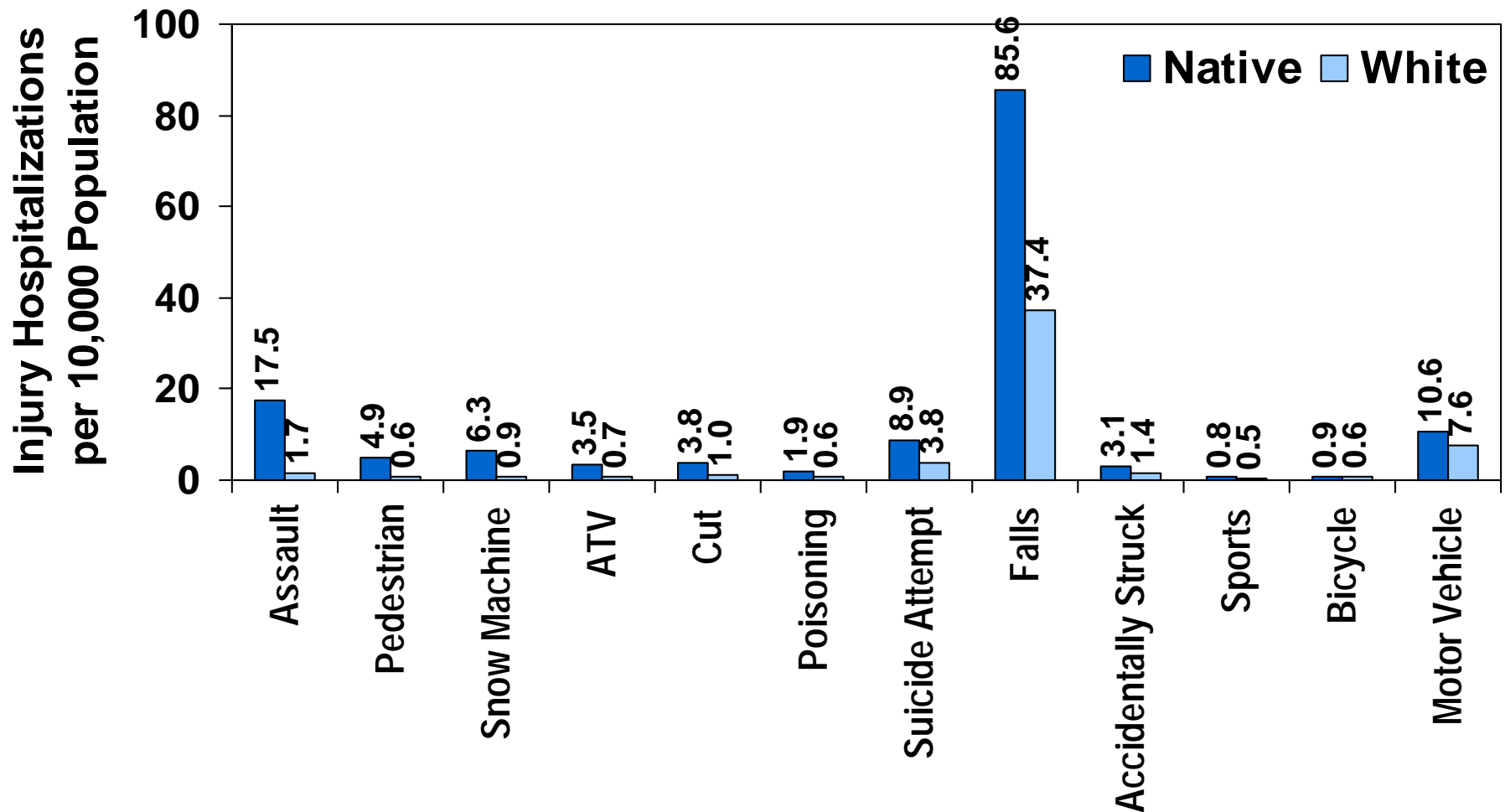
- ✓ Largest Native:White Rate Ratios:
 - ✓ Assault
 - ✓ Snow Machine
 - ✓ Pedestrian
 - ✓ ATV
 - ✓ Suicide Attempt
- ✓ Largest Native:White Rate Differences:
 - ✓ Assault
 - ✓ Suicide Attempt
 - ✓ Falls
 - ✓ Snow Machine

Causes of Injury with Largest Regional Disparities among Injury Hospitalization Rates, **Men 20-44**

- ✓ Largest Rural:Urban Rate Ratios:
 - ✓ ATV
 - ✓ Snow Machine
 - ✓ Accidentally Struck
 - ✓ Cut
- ✓ Largest Rural-Urban Rate Differences:
 - ✓ Falls
 - ✓ Snow Machine
 - ✓ Assault
 - ✓ Suicide Attempt

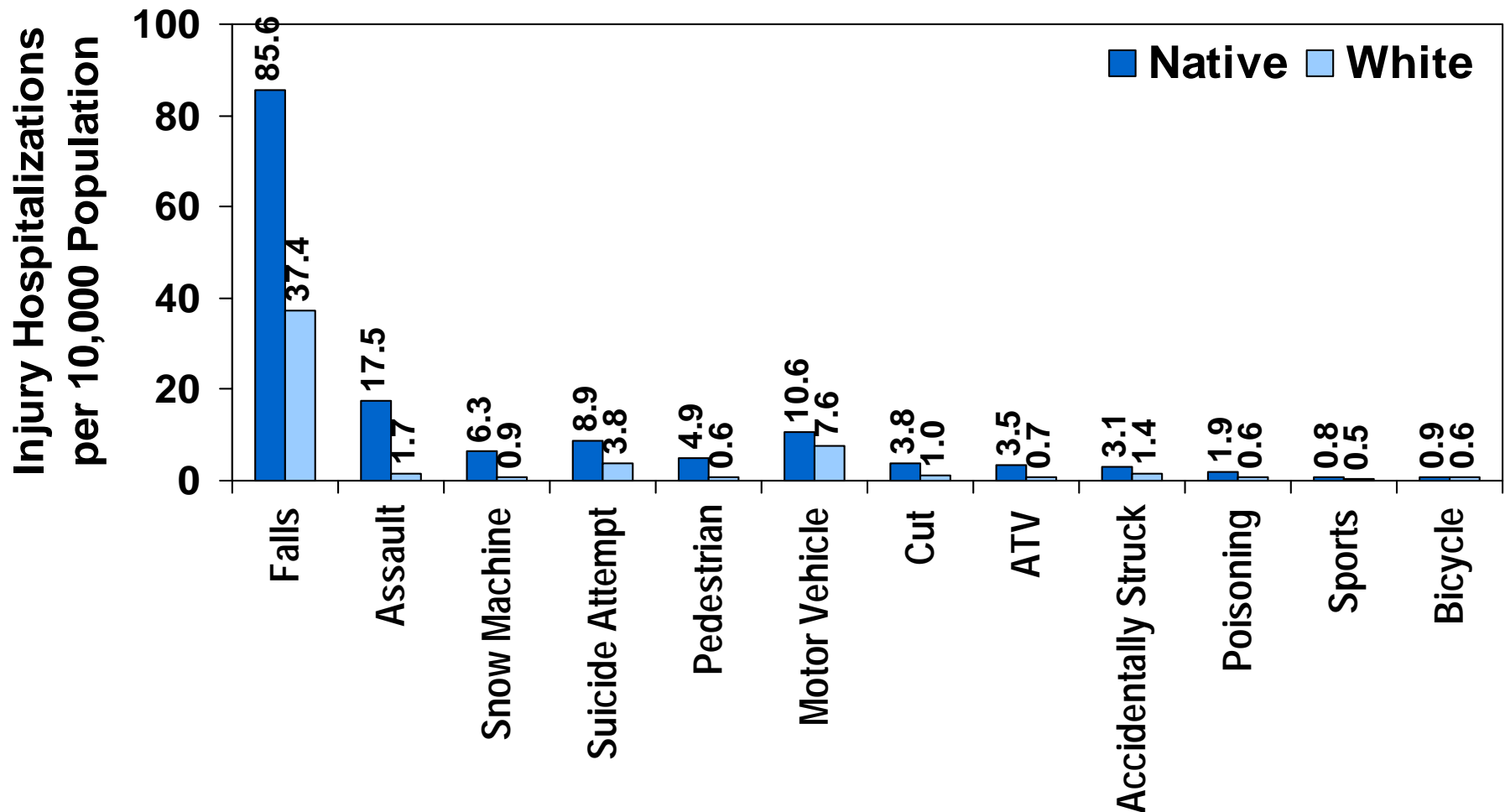
Injury Hospitalization Rates by Race and Cause: ***Adults 45+, 1994-1999***

(Ordered from highest (left) to lowest Native-to-White Rate Ratio)



Injury Hospitalization Rates by Race and Cause: ***Adults 45+, 1994-1999***

(Ordered from highest (left) to lowest Native-to-White Rate Difference)

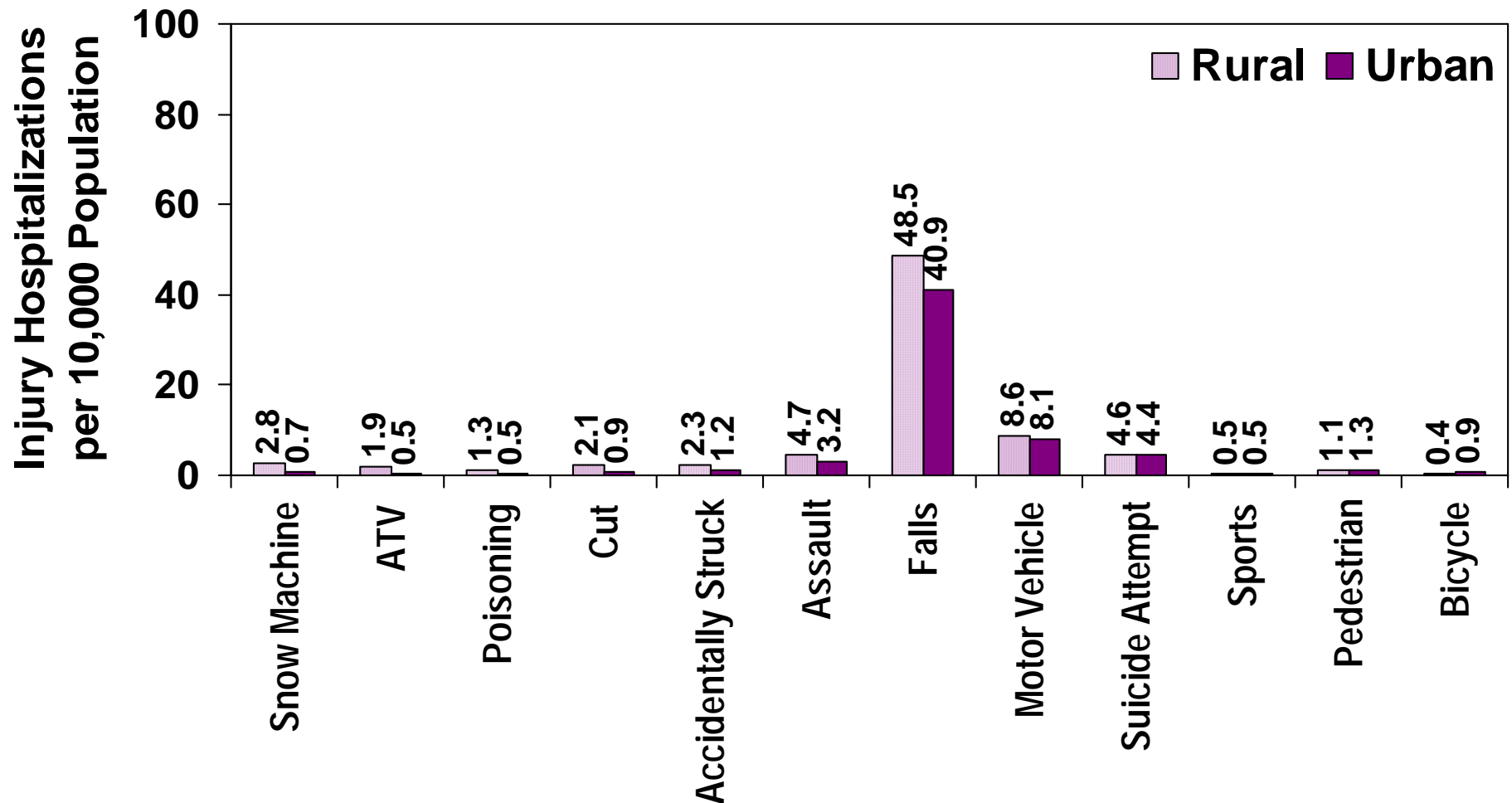


Injury Hospitalization Rates by Race and Cause, Native:White Rate Ratios and Native-White Rate Differences: **Adults 45+**, 1994-1999

Cause	Native		White		Rate Ratio (N:W)	Rate Difference (N-W)
	Count	Rate	Count	Rate		
Falls	986	85.6	2740	37.4	2.3	48.3
Assault	202	17.5	127	1.7	10.1	15.8
Motor Vehicle	122	10.6	559	7.6	1.4	3.0
Suicide Attempt	102	8.9	275	3.8	2.4	5.1
Snow Machine	73	6.3	68	0.9	6.8	5.4
Pedestrian	56	4.9	45	0.6	8.0	4.3
Cut	44	3.8	72	1.0	3.9	2.8
ATV	40	3.5	54	0.7	4.7	2.7
Accidentally Struck	36	3.1	102	1.4	2.3	1.7
Poisoning	22	1.9	44	0.6	3.2	1.3
Bicycle	10	0.9	42	0.6	1.5	0.3
Sports	9	0.8	34	0.5	1.7	0.3

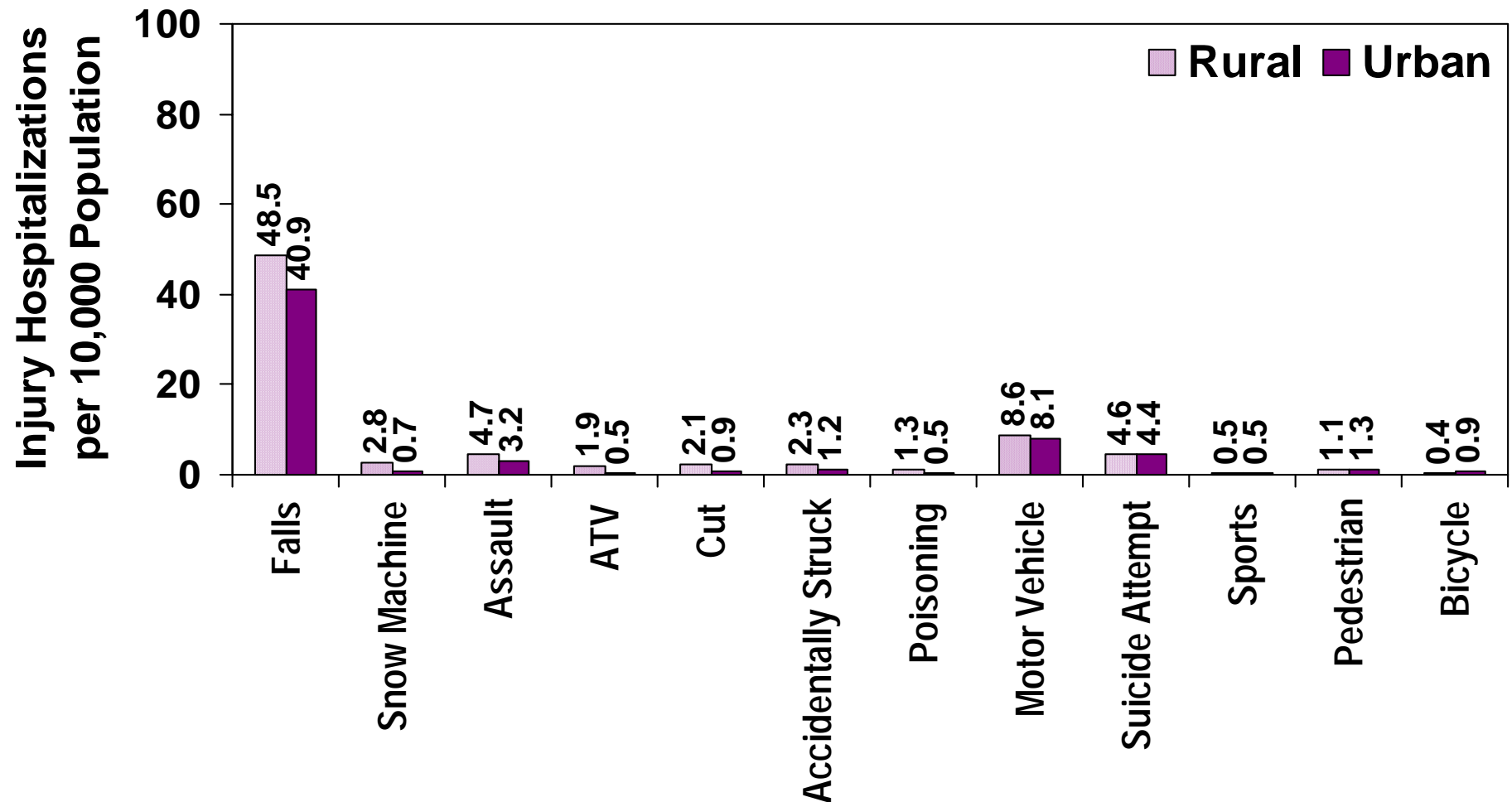
Injury Hospitalization Rates by Region and Cause: ***Adults 45+, 1994-1999***

(Ordered from highest (left) to lowest Rural-to-Urban Rate Ratio)



Injury Hospitalization Rates by Region and Cause: **Adults 45+, 1994-1999**

(Ordered from highest (left) to lowest Rural-to-Urban Rate Difference)



Injury Hospitalization Rates by Region and Cause, Rural:Urban Rate Ratios and Rural-Urban Rate Differences: **Adults 45+**, 1994-1999

Cause	Rural		Urban		Rate Ratio (R:U)	Rate Difference (R-U)
	Count	Rate	Count	Rate		
Falls	1848	48.5	2165	40.9	1.2	7.6
Motor Vehicle	328	8.6	426	8.1	1.1	0.6
Assault	180	4.7	169	3.2	1.5	1.5
Suicide Attempt	176	4.6	233	4.4	1.0	0.2
Snow Machine	108	2.8	35	0.7	4.3	2.2
Accidentally Struck	89	2.3	62	1.2	2.0	1.2
Cut	80	2.1	48	0.9	2.3	1.2
ATV	72	1.9	24	0.5	4.2	1.4
Poisoning	48	1.3	27	0.5	2.5	0.8
Pedestrian	43	1.1	70	1.3	0.9	-0.2
Sports	19	0.5	27	0.5	1.0	0.0
Bicycle	15	0.4	47	0.9	0.4	-0.5

Causes of Injury with Largest Racial Disparities among Injury Hospitalization Rates, **Adults 45+**

- ✓ Largest Native:White Rate Ratios:
 - ✓ Assault
 - ✓ Pedestrian
 - ✓ Snow Machine
 - ✓ ATV
- ✓ Largest Native:White Rate Differences:
 - ✓ Falls
 - ✓ Assault
 - ✓ Snow Machine
 - ✓ Suicide Attempt

Causes of Injury with Largest Regional Disparities among Injury Hospitalization Rates, **Adults 45+**

- ✓ Largest Rural:Urban Rate Ratios:
 - ✓ Snow Machine
 - ✓ ATV
- ✓ Largest Rural-Urban Rate Differences:
 - ✓ Falls

Summary: Disparities in Specific Causes of Injury Death

- ✓ Racial disparities are generally larger than regional disparities (based on RRs)
- ✓ Large racial disparities seen across all groups for:
 - ✓ Snow machine, ATV
 - ✓ Suicide Attempt
 - ✓ Assault
 - ✓ Falls
- ✓ Large regional disparities seen across all groups for:
 - ✓ Snow machine
 - ✓ ATV
 - ✓ Falls

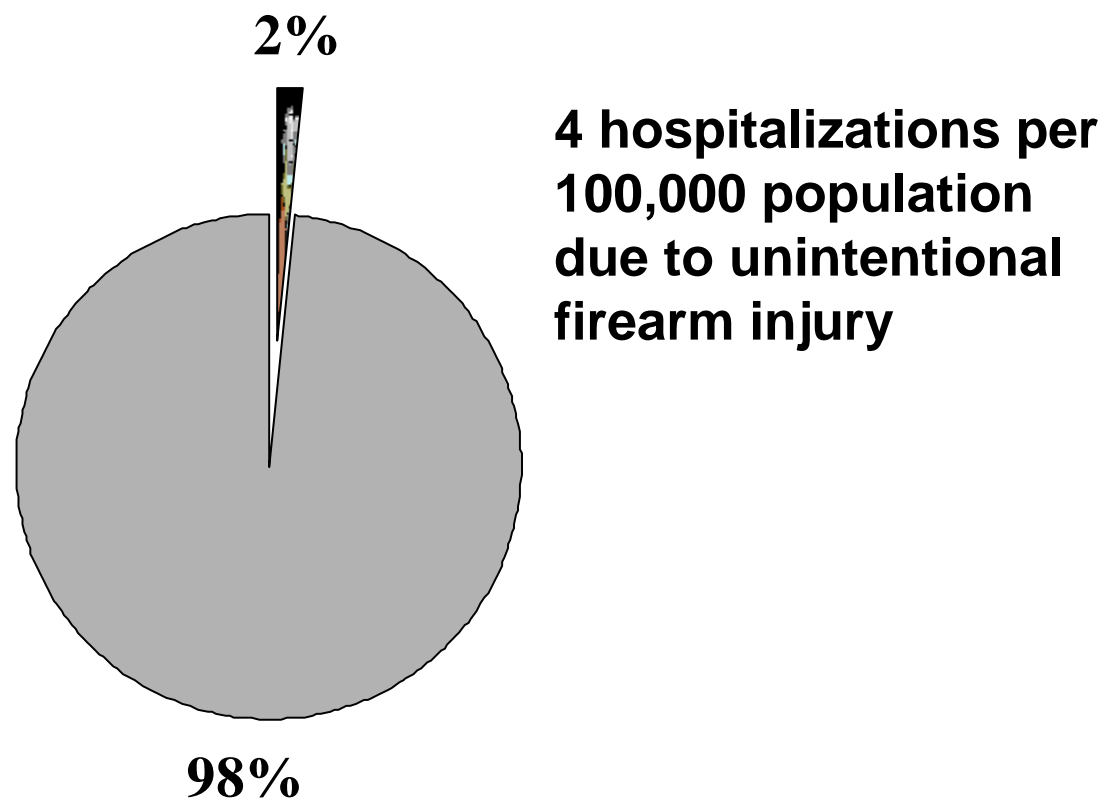
Firearm Involvement in Hospitalization for Unintentional Injury, Suicide Attempt, and Assault

Alaska 1994-1999

Rates of Injury Hospitalization Due to Firearms
and
Racial and Regional Disparities in Intentional
Injuries, by Firearm Use

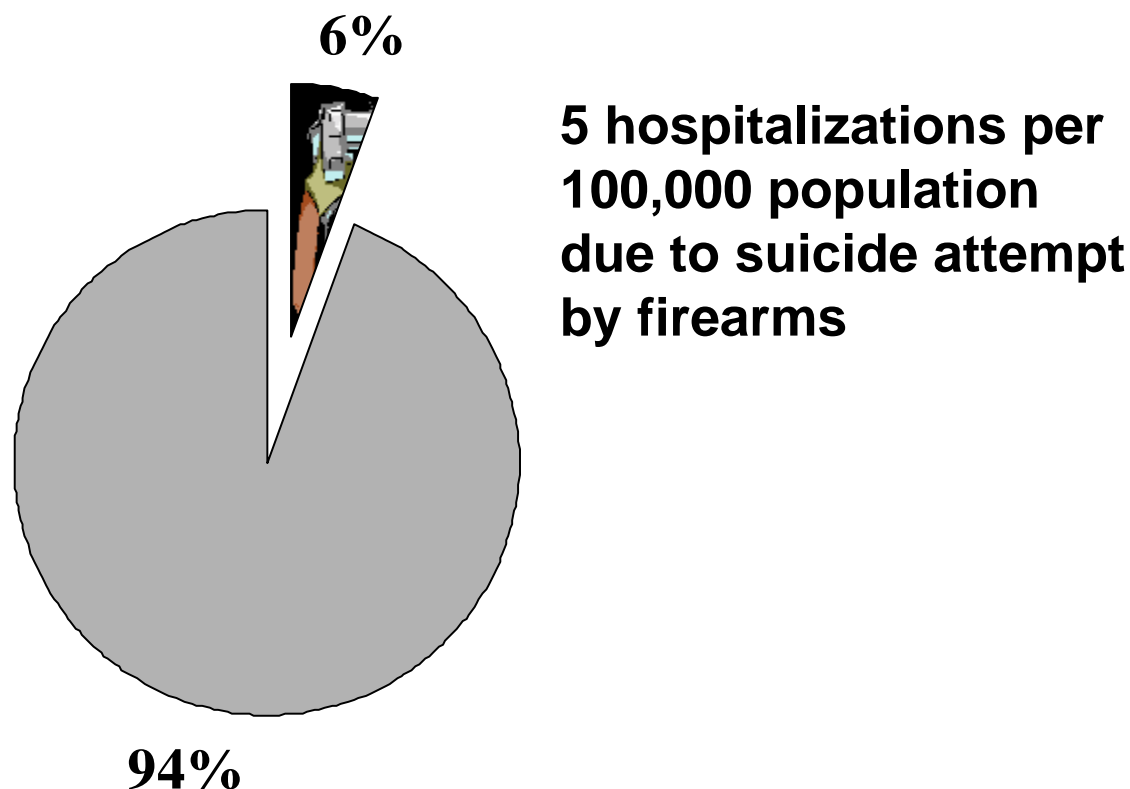
Unintentional Injury Hospitalizations (Firearms vs. Other) Alaska Residents (N = 19,784), 1994-1999

■ Unintentional, Firearms ■ Unintentional, Other



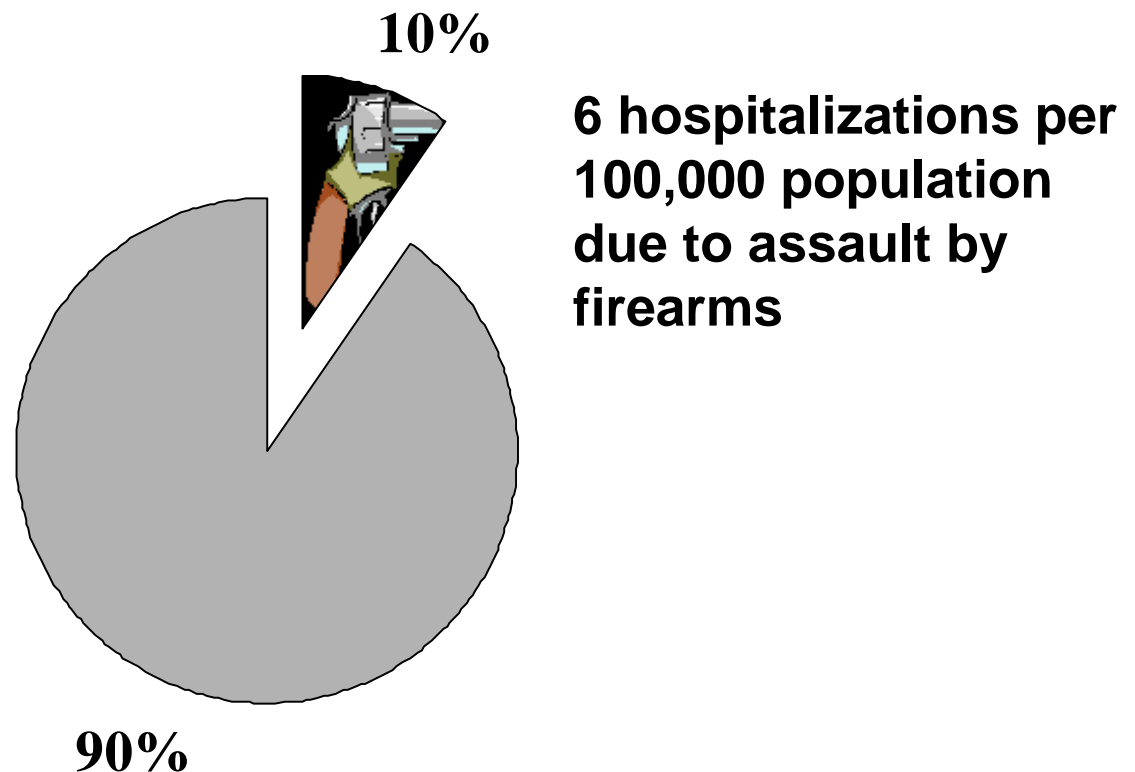
Suicide Attempt Hospitalizations (Firearms vs. Other) Alaska Residents (N = 3,349), 1994-1999

■ Suicide Attempt, Firearms ■ Suicide Attempt, Other

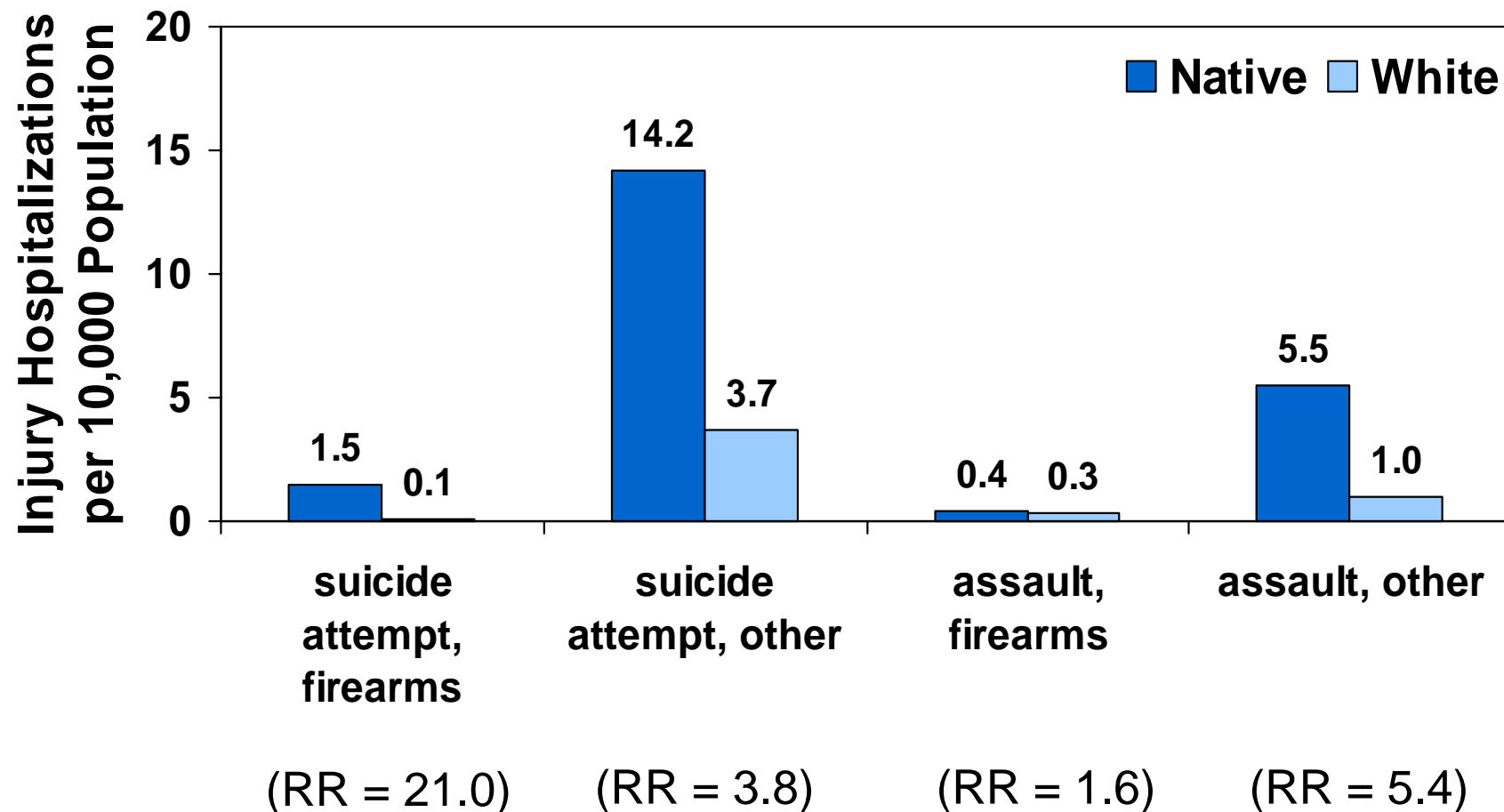


Assault Injury Hospitalizations (Firearms vs. Other) Alaska Residents (N = 2,090), 1994-1999

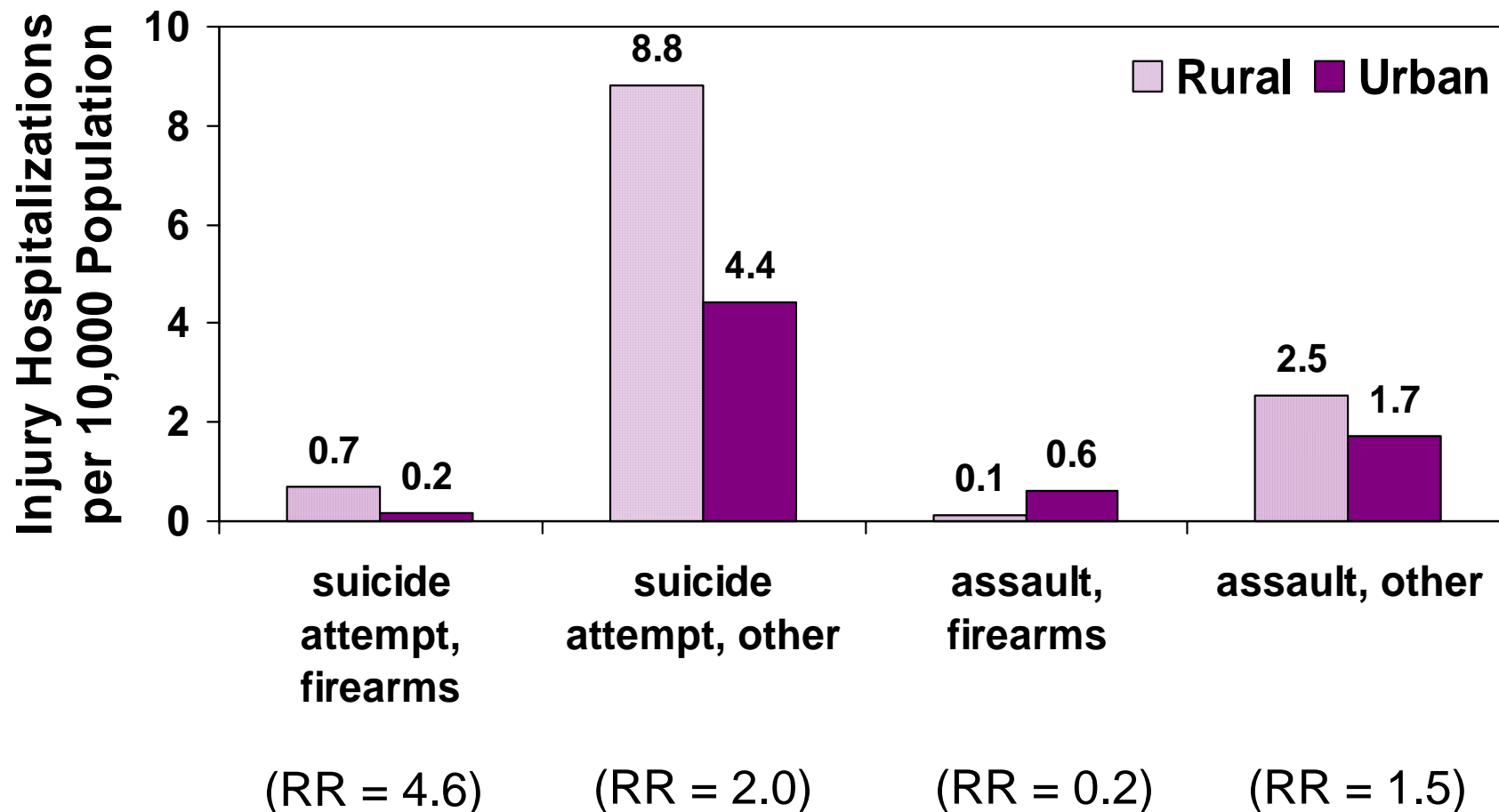
■ Assault, Firearms ■ Assault, Other



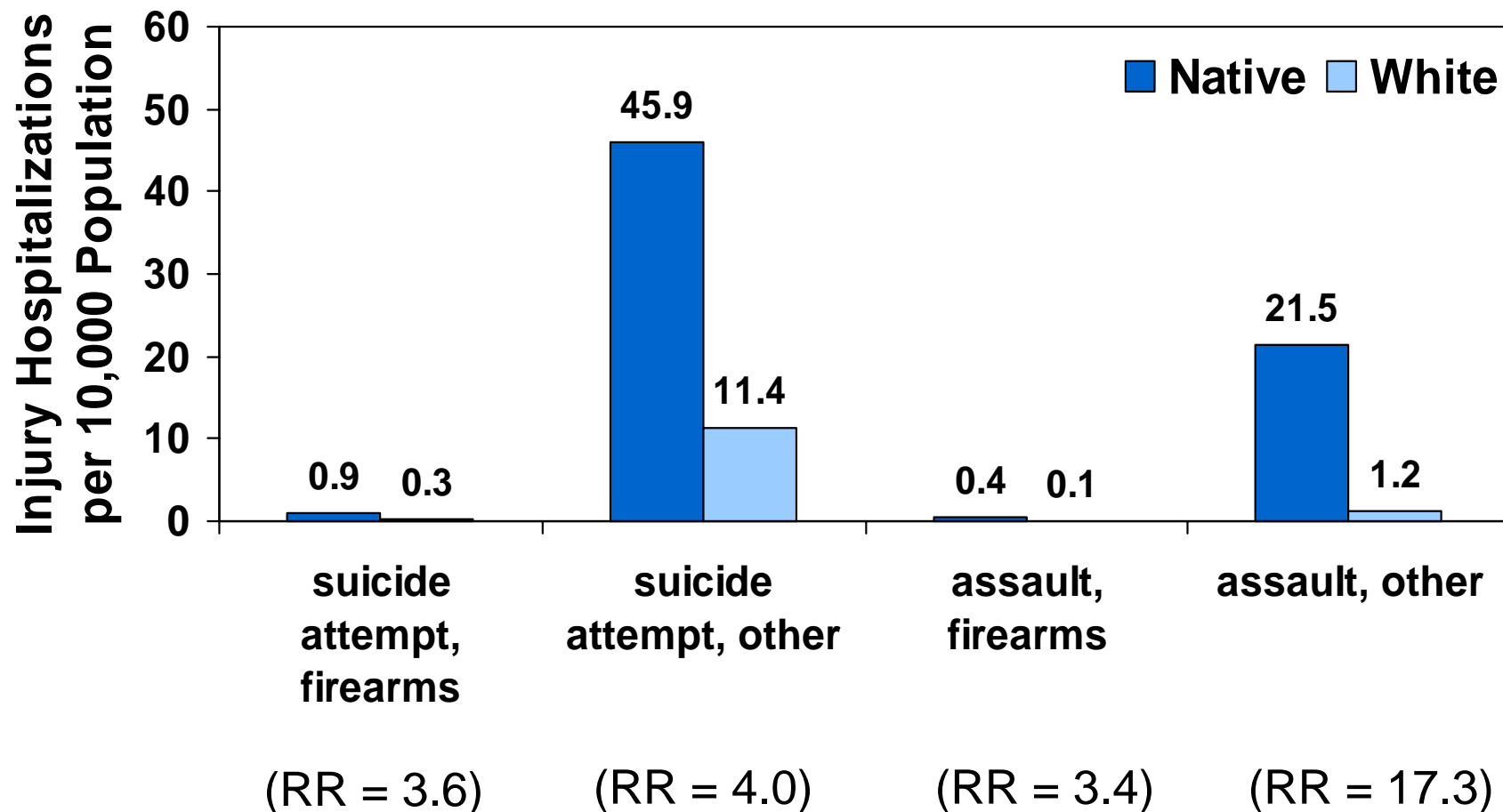
Suicide Attempt and Assault Injury Hospitalization Rates by Race and Involvement of Firearms: *Youth 0-19, 1994-1999*



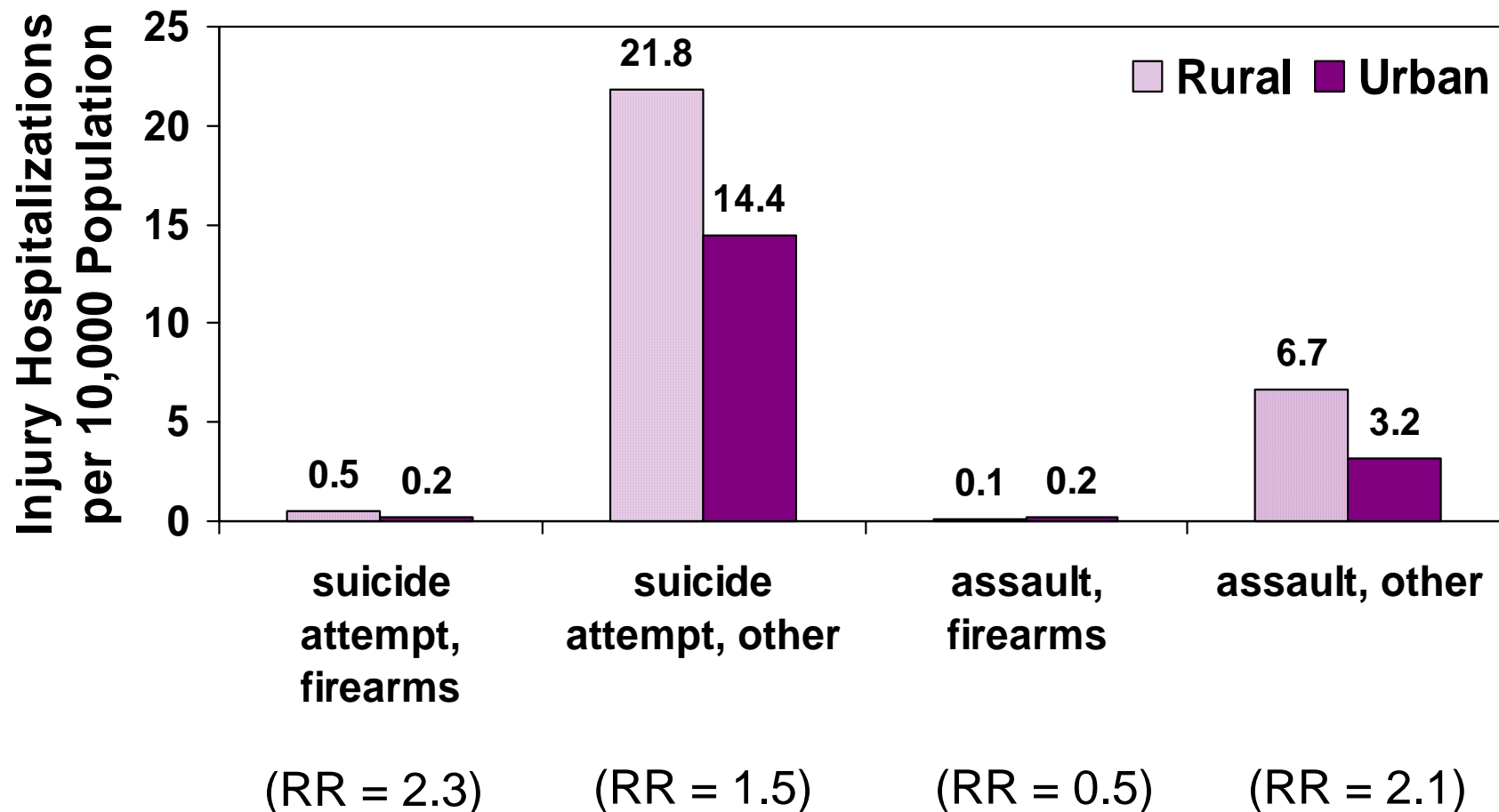
Suicide Attempt and Assault Injury Hospitalization Rates by Region and Involvement of Firearms: *Youth 0-19, 1994-1999*



Suicide Attempt and Assault Injury Hospitalization Rates by Race and Involvement of Firearms: *Women 20-44, 1994-1999*

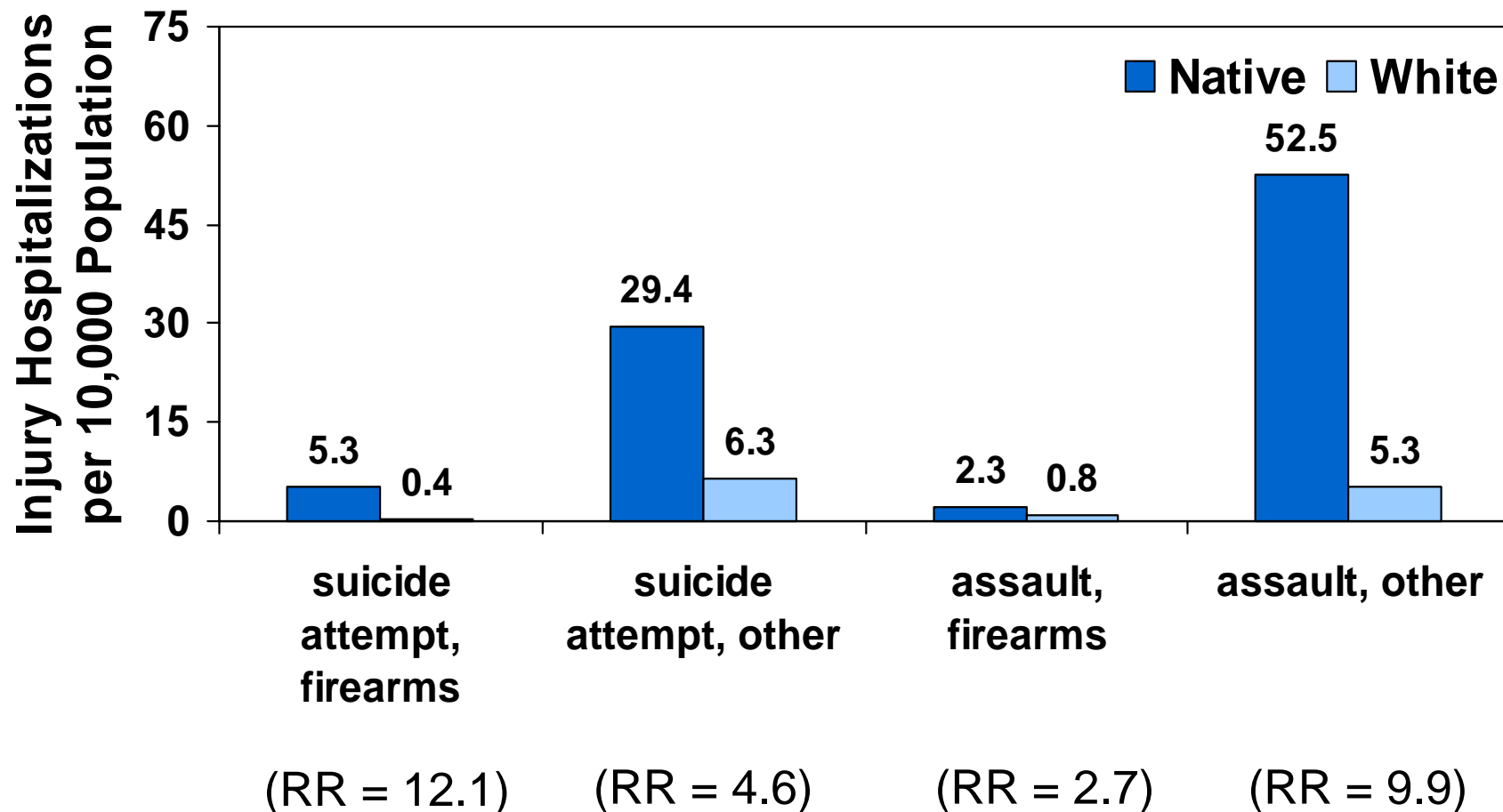


Suicide Attempt and Assault Injury Hospitalization Rates by Region and Involvement of Firearms: *Women 20-44, 1994-1999*

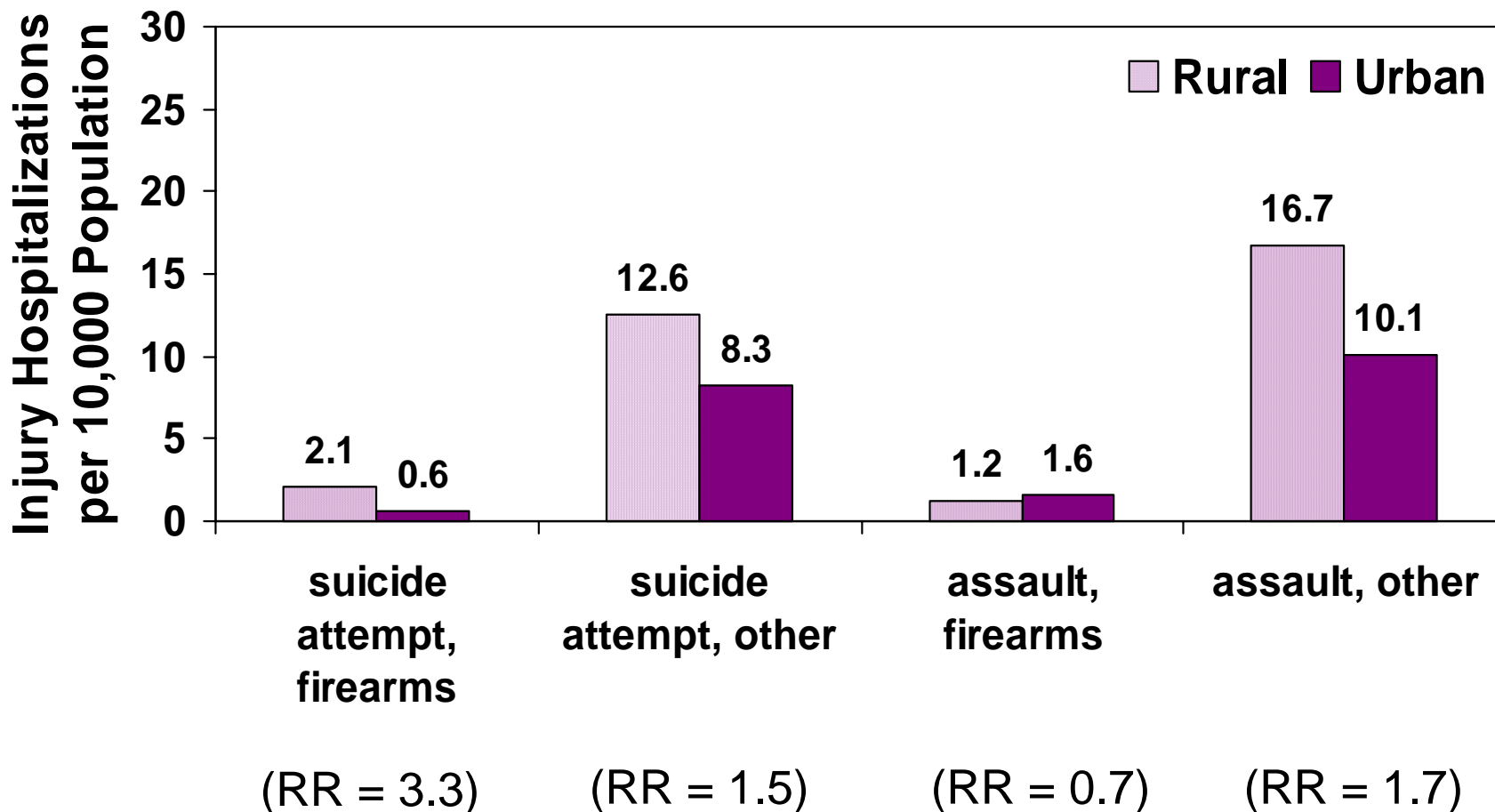


Suicide Attempt and Assault Injury Hospitalization Rates by Race and Involvement of Firearms:

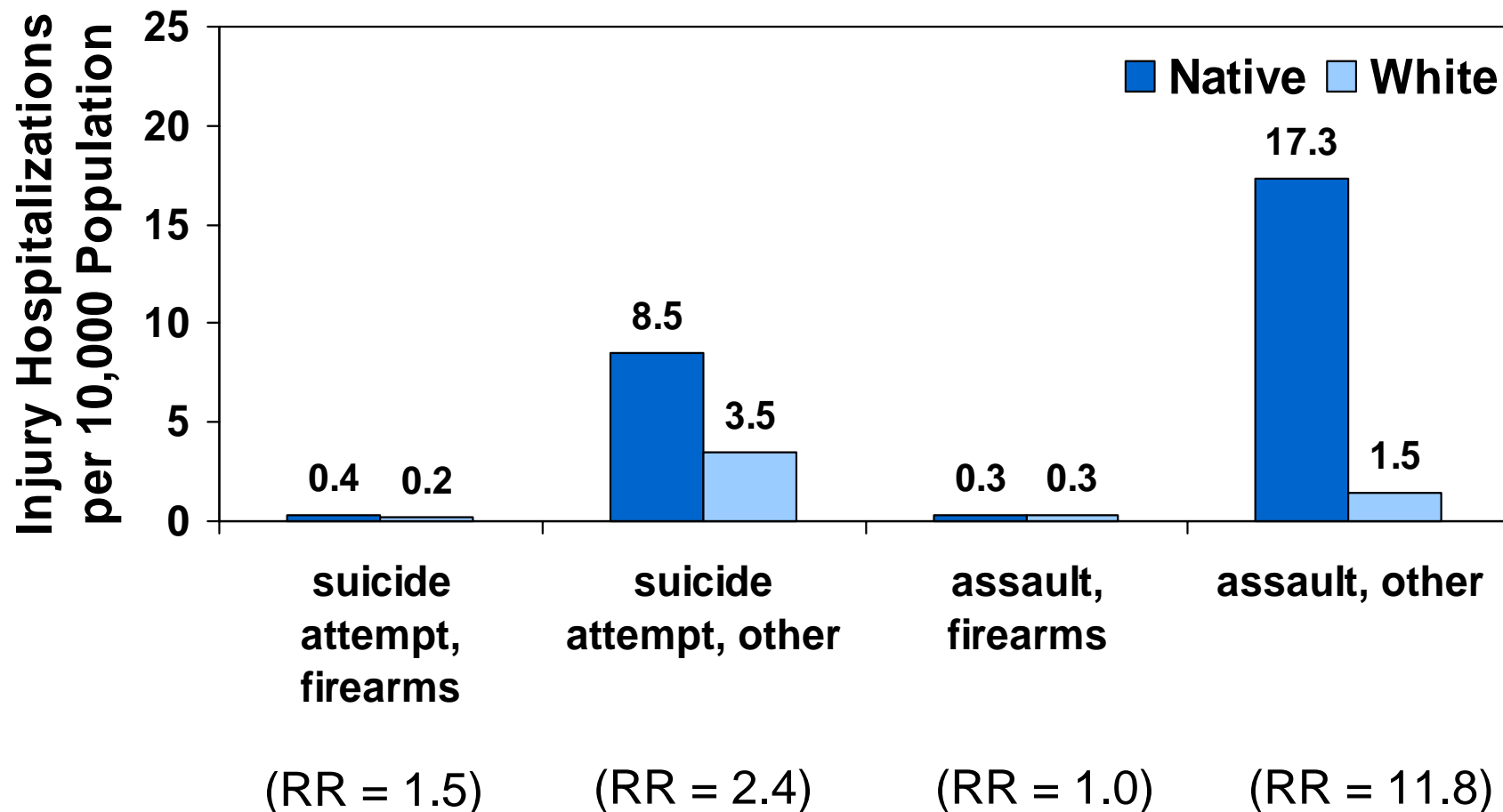
Men 20-44, 1994-1999



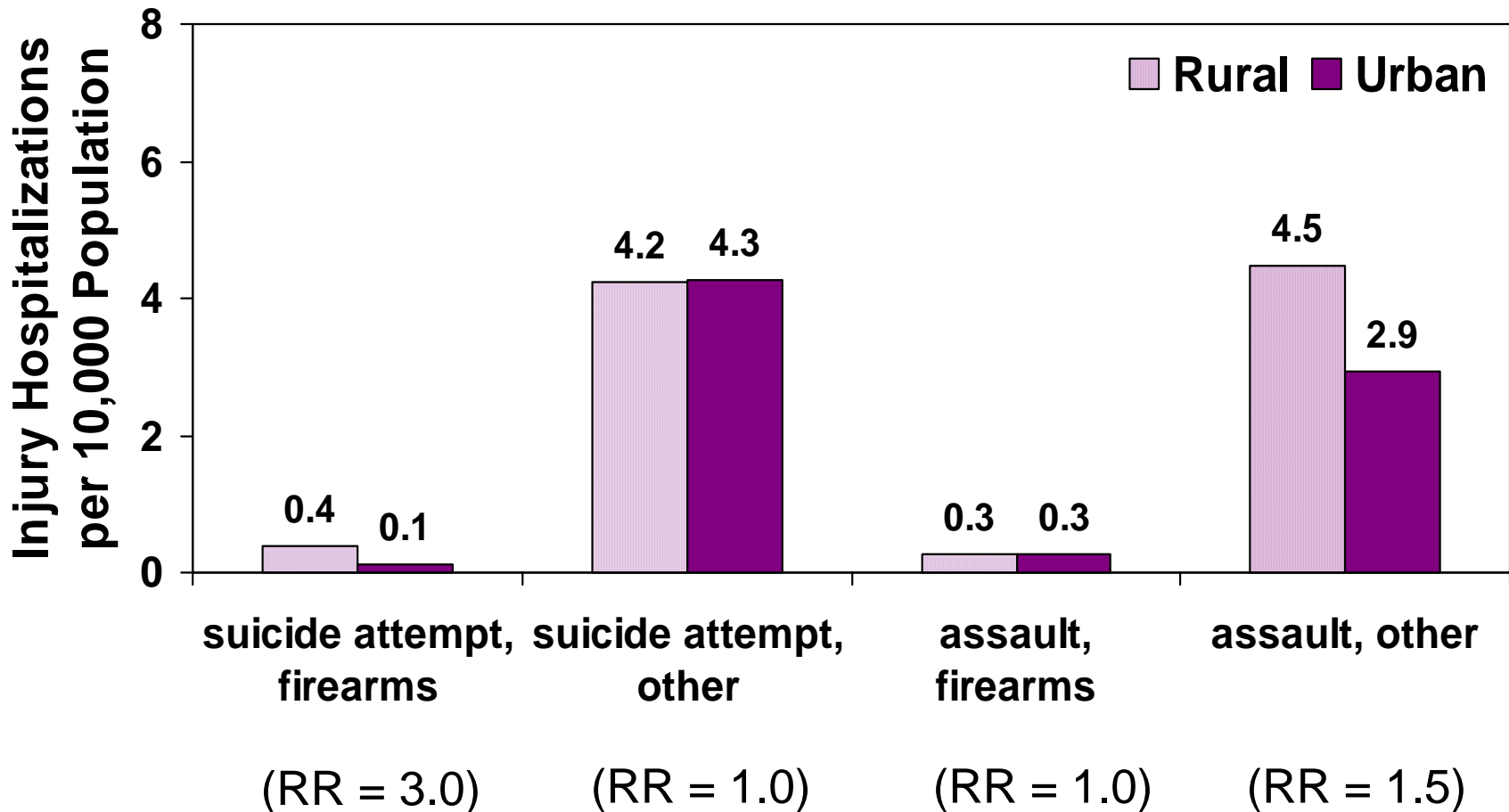
Suicide Attempt and Assault Injury Hospitalization Rates by Region and Involvement of Firearms: *Men 20-44, 1994-1999*



Suicide Attempt and Assault Injury Hospitalization Rates by Race and Involvement of Firearms: *Adults 45+, 1994-1999*



Suicide Attempt and Assault Injury Hospitalization Rates by Region and Involvement of Firearms: *Adults 45+, 1994-1999*



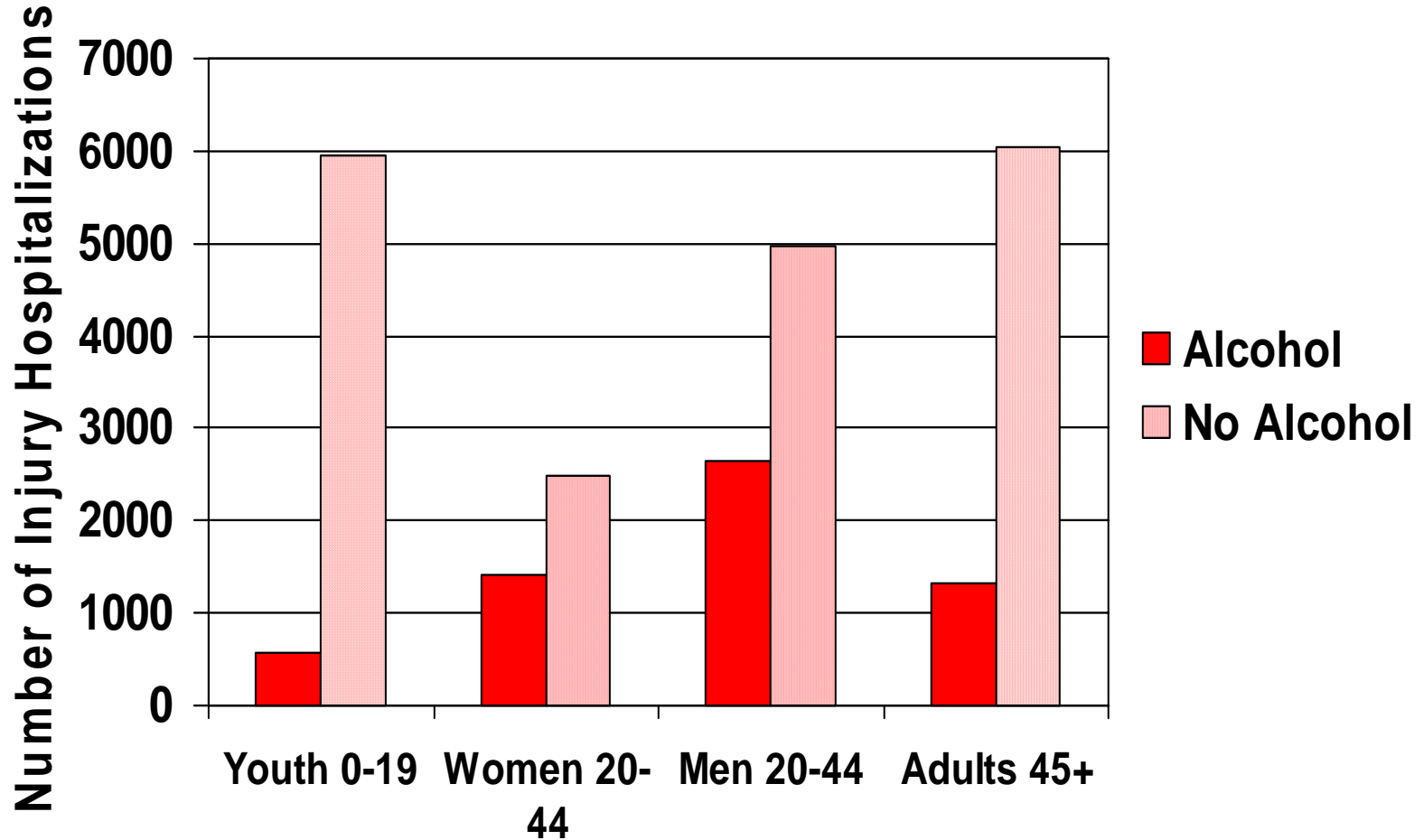
Summary: Firearms as a Cause of Injury

- ✓ Firearms were associated with the 2% of unintentional injury hospitalizations, 6% of suicide attempt hospitalizations, and 10% of assault hospitalizations of Alaskan residents from 1994 through 1999.
- ✓ Among youth 0-19 and men 20-44, there were much larger racial disparities among rates of suicide attempts by firearms compared to suicide attempts by other means.
- ✓ Conversely, rates of assault by other means evidenced larger racial disparities in all groups compared to rates of assault by firearms.
- ✓ The involvement of firearms was not a major factor in the magnitude of regional disparities among intentional injury rates in any group.

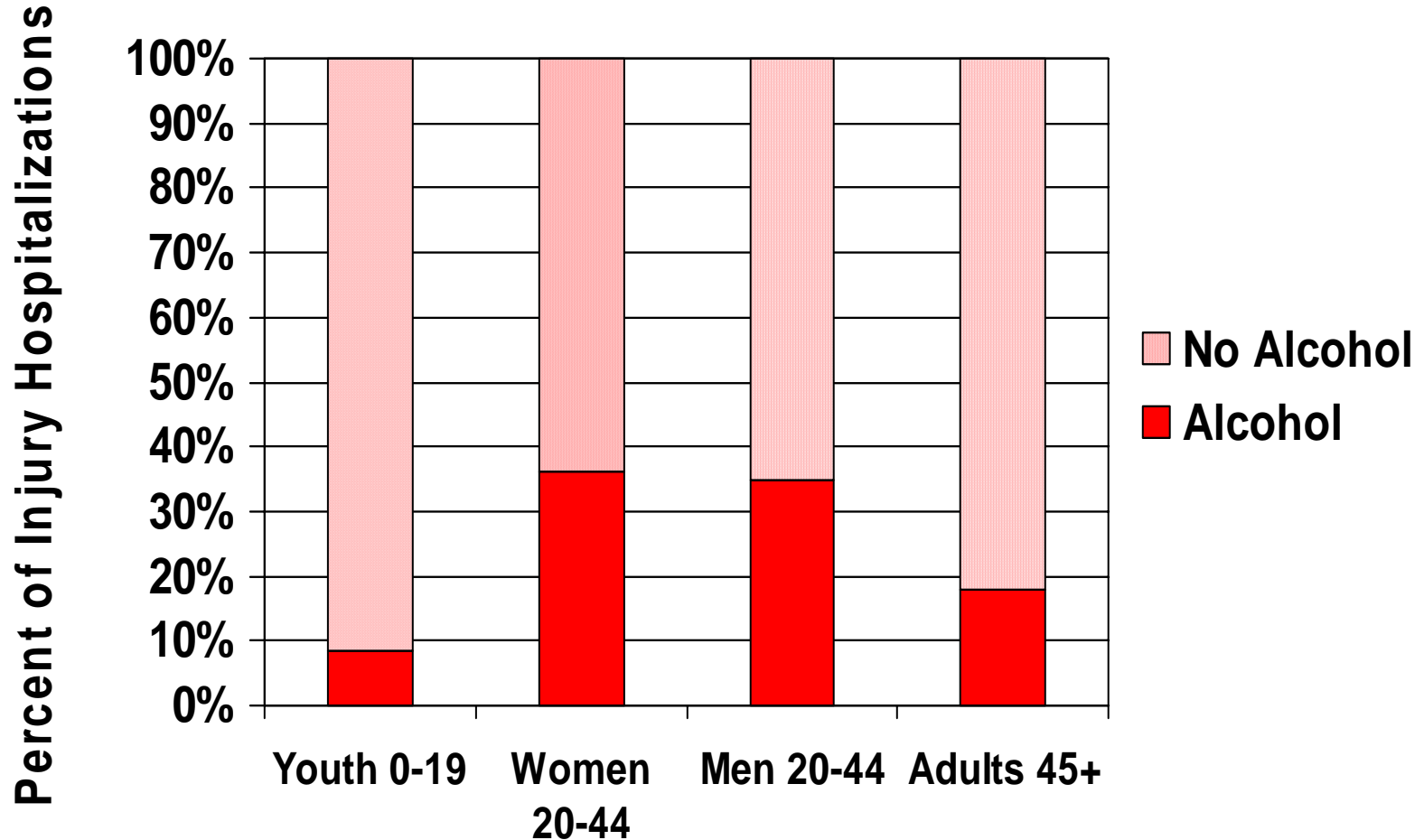
Substance Involvement in Hospitalization for Unintentional Injury, Suicide Attempt, and Assault Alaska 1994-1999

Injury Hospitalization by Alcohol and Drug Use,
Cause of Injury, and Age

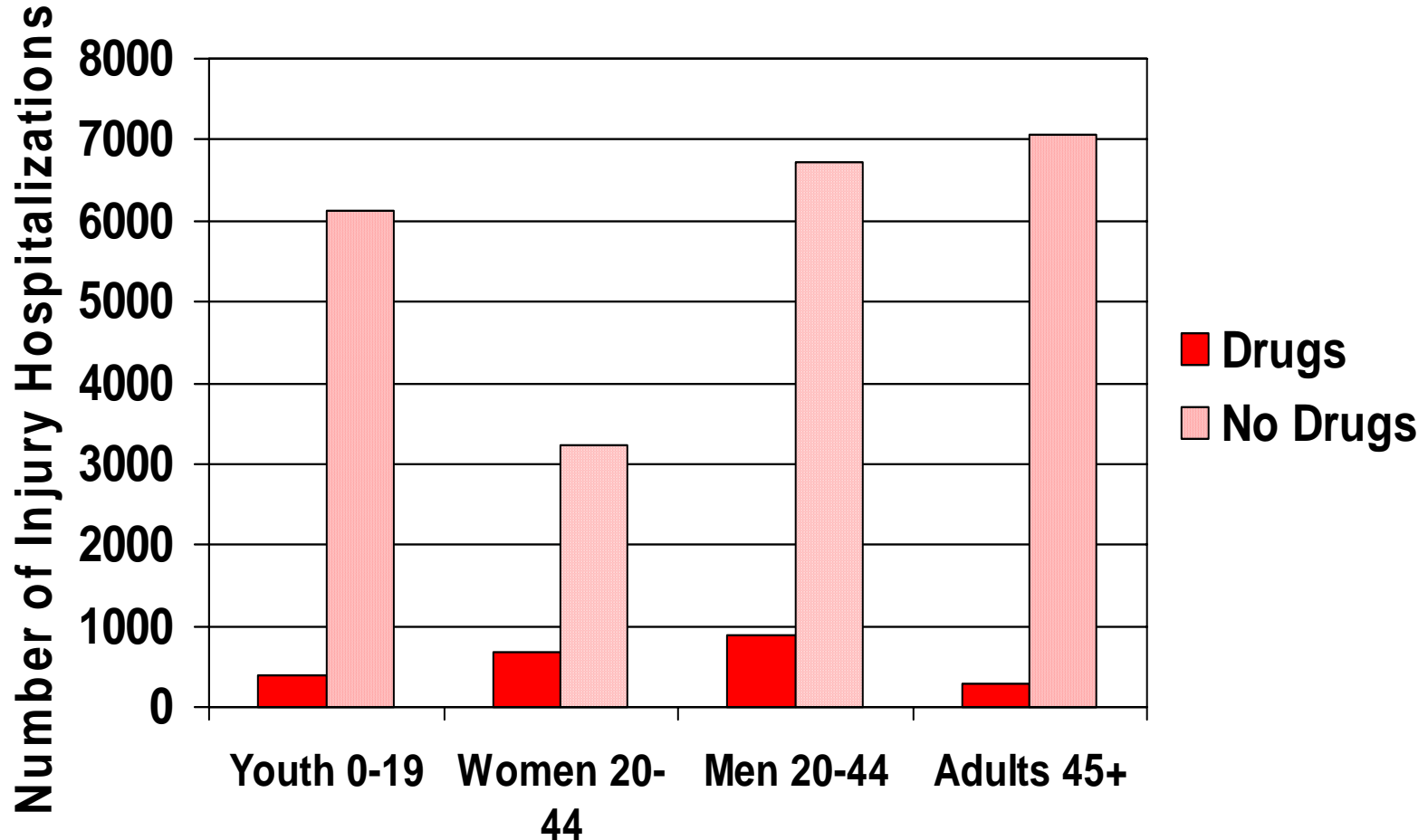
Injury Hospitalizations by Alcohol Involvement and Target Population, Alaska Residents, 1994-1999



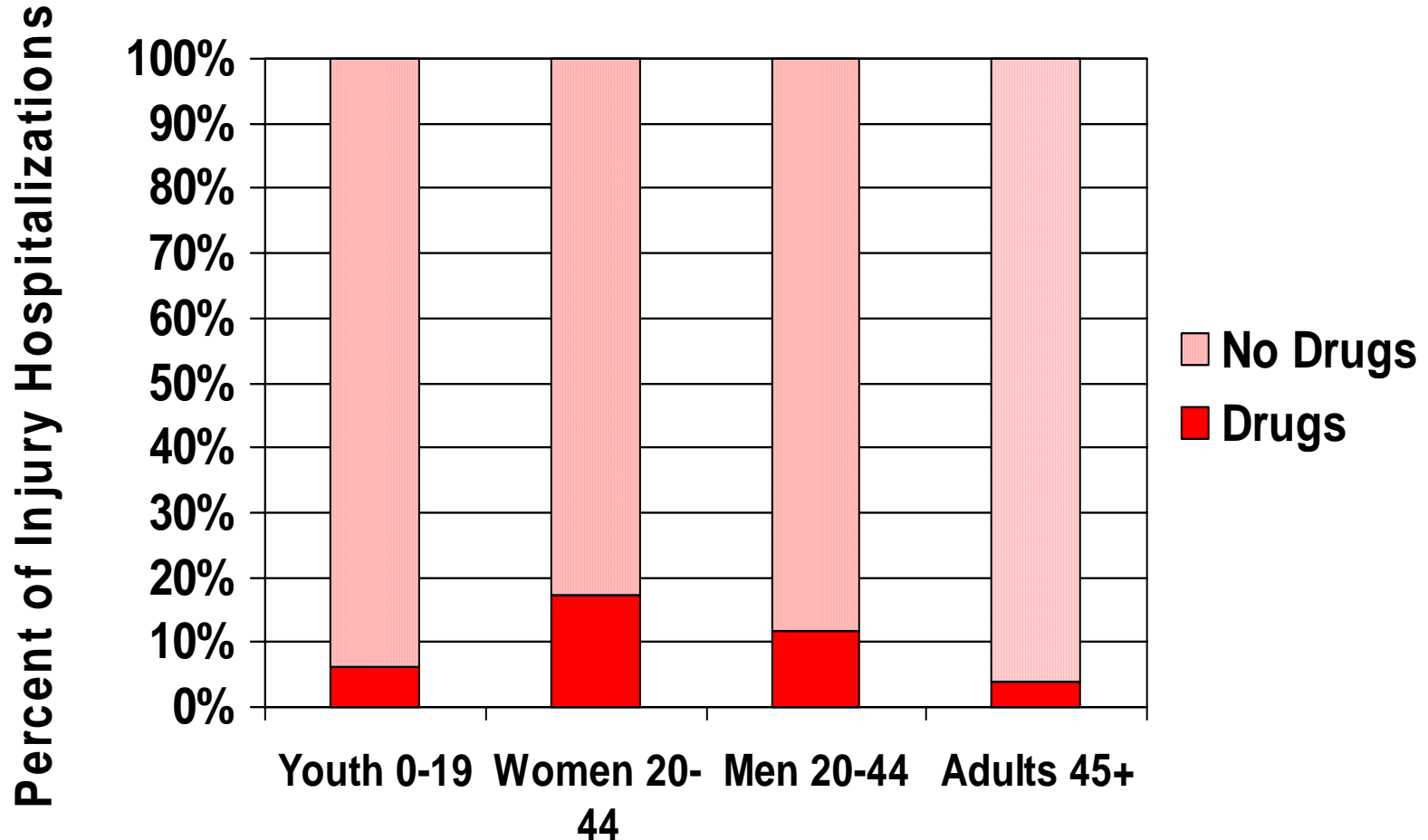
Injury Hospitalizations by Alcohol Involvement and Target Population, Alaska Residents, 1994-1999



Injury Hospitalizations by Drug Involvement and Target Population, Alaska Residents, 1994-1999

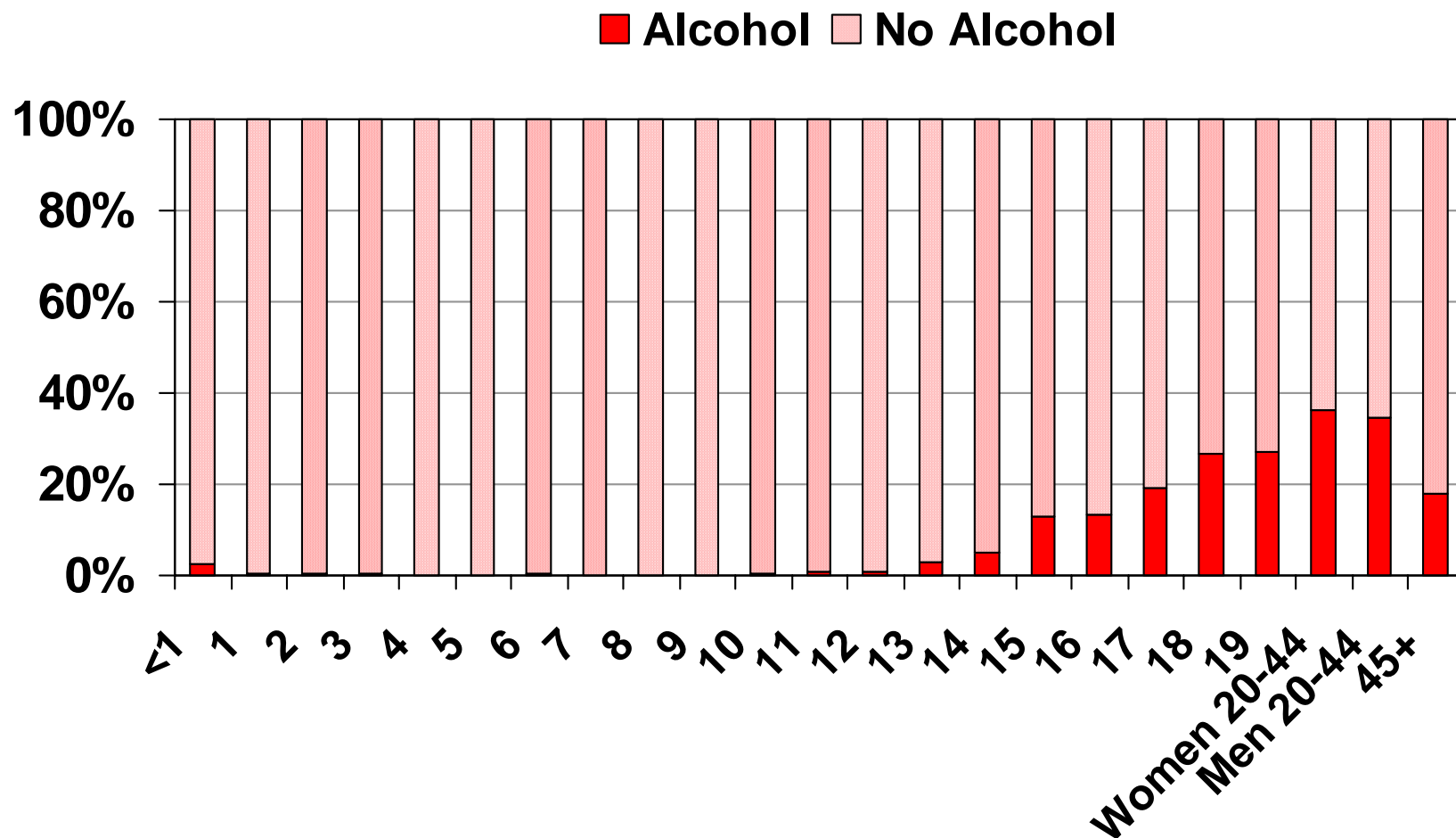


Injury Hospitalizations by Drug Involvement and Target Population, Alaska Residents, 1994-1999

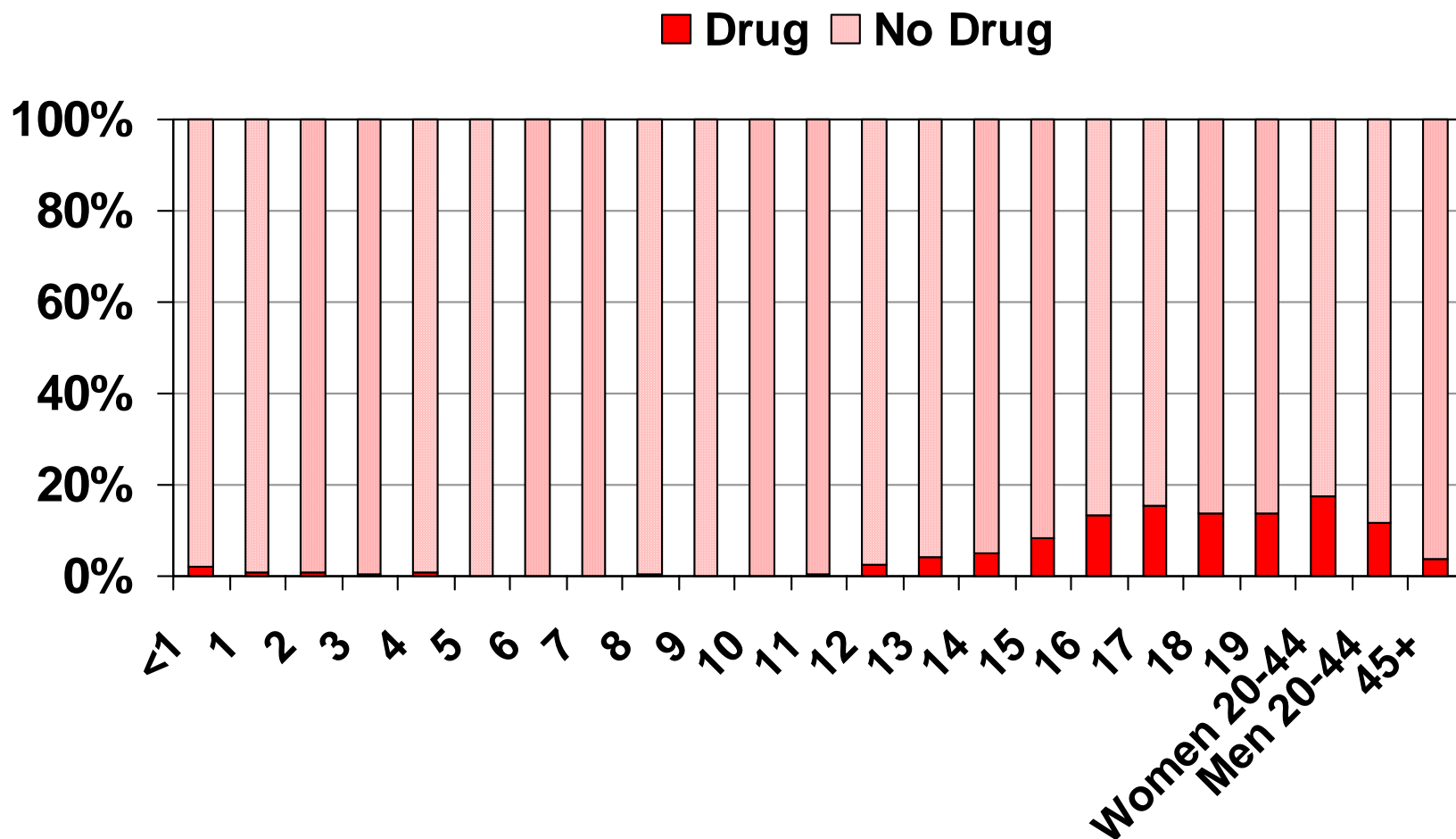


Source: DHSS/CHEMS, AK Trauma
Registry

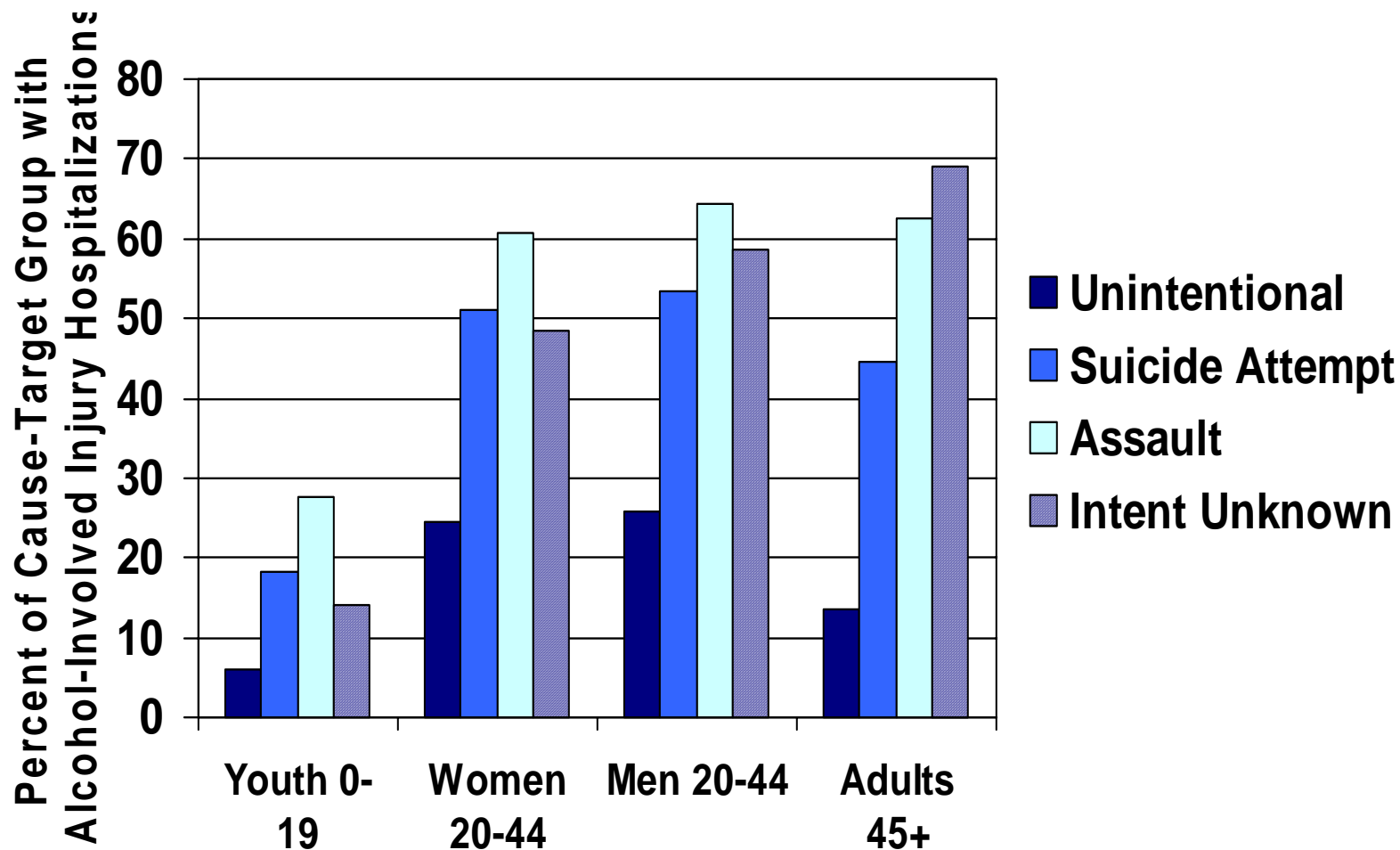
Injury Hospitalizations by Alcohol Involvement, Selected Ages, Alaska Residents, 1994-1999



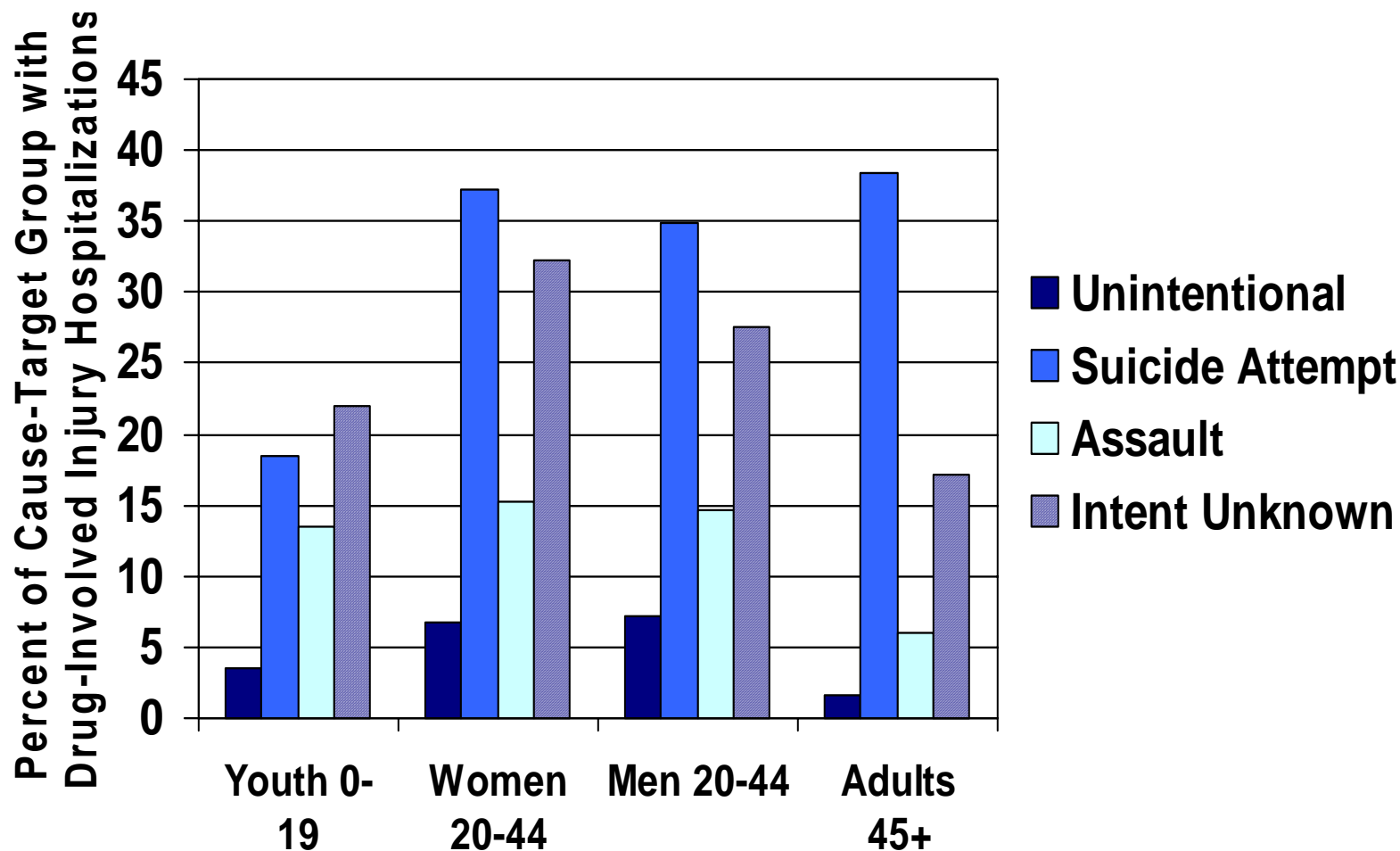
Injury Hospitalizations by Drug Involvement, Selected Ages, Alaska Residents, 1994-1999



Percent of Injury Hospitalizations that Involved Alcohol, within Target Population and Cause Alaska Residents, 1994-1999



Percent of Injury Hospitalizations that Involved Drugs, within Target Population and Cause Alaska Residents, 1994-1999



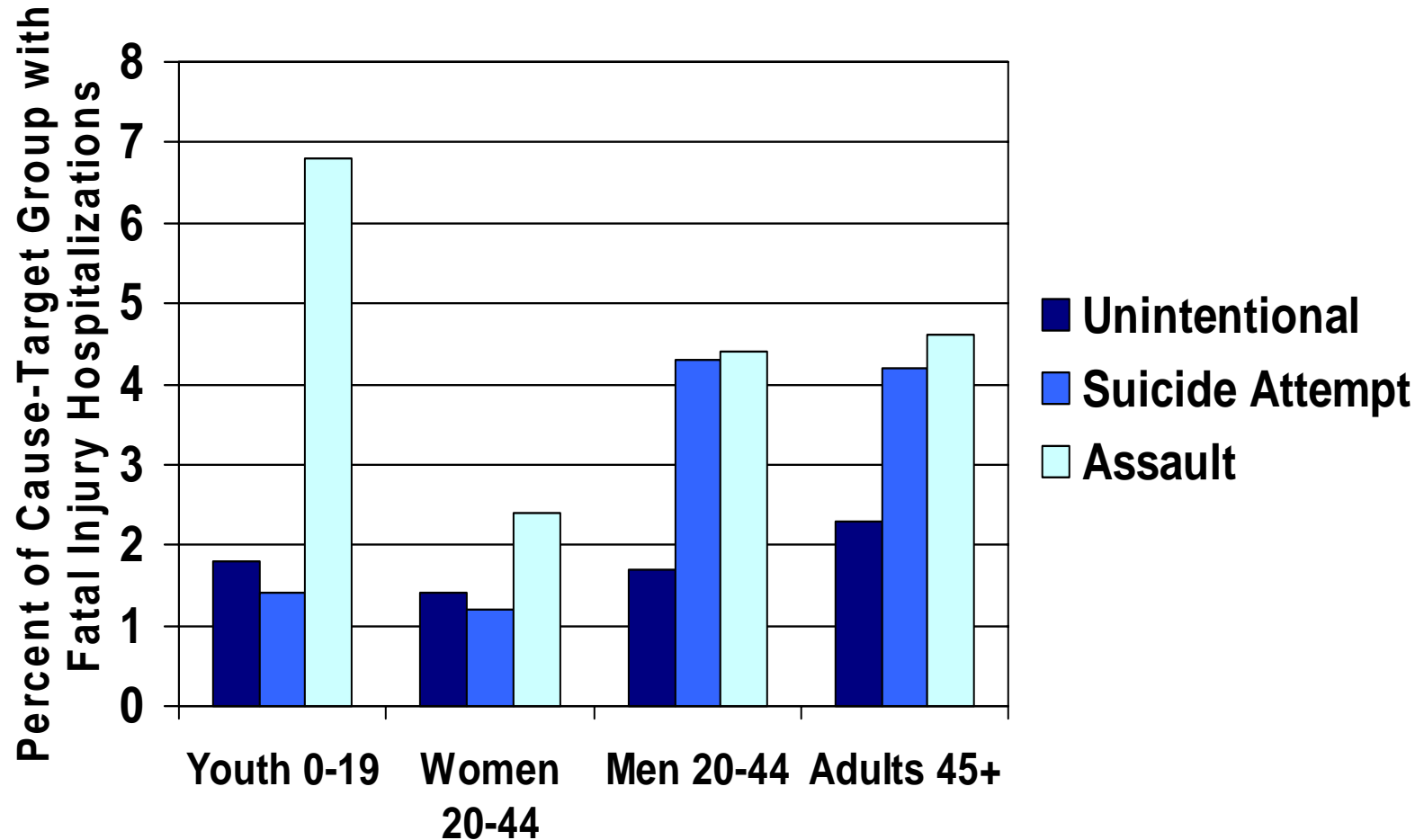
Summary: Alcohol, Drugs, and Injury Hospitalization

- ✓ Women and men 20-44 have the highest proportion of injury hospitalizations that were alcohol or drug-involved.
- ✓ Among 0-19 age group, alcohol-involved injuries begin to increase around age 15.
- ✓ Assault injury hospitalizations are more likely to involve alcohol than either unintentional or suicide attempt injury hospitalizations.
- ✓ Suicide attempts are more likely to involve drugs than either unintentional or assault injury hospitalizations.
- ✓ In terms of the association with drug use, “Intent Unknown”’s look more like suicide attempts than unintentional injuries or assaults, especially for youth and women.

Fatality of Hospitalizations for Unintentional Injury, Suicide Attempt, and Assault

Alaska 1994-1999

Percent of Injury Hospitalizations that were Fatal within Target Population and Cause, Alaska Residents, 1994-1999



Summary: Fatal Injury Hospitalization

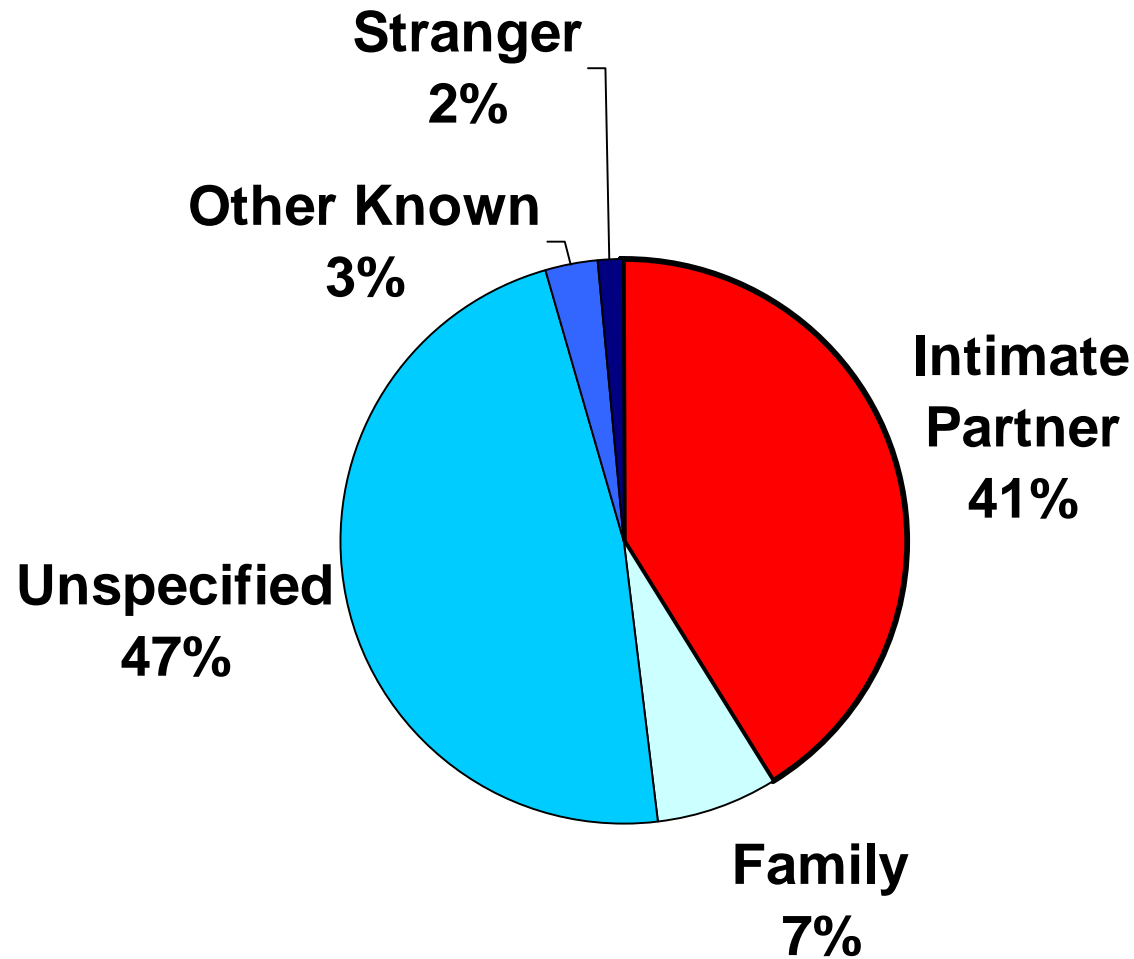
- ✓ Between 1% and 7% of injuries reported through the trauma registry were fatal, depending on target group and cause of injury.
- ✓ Assaults among youth were more likely to be fatal relative to all other cause of injury-target group combinations.
- ✓ Relative to youth and women 20-44, men 20-44 and adults over 44 experience a higher percentage of hospitalizations for suicide attempt that result in fatality.

Examining the High rate of Assaults to Women 20-44 and 75+ Alaska, 1994-1999

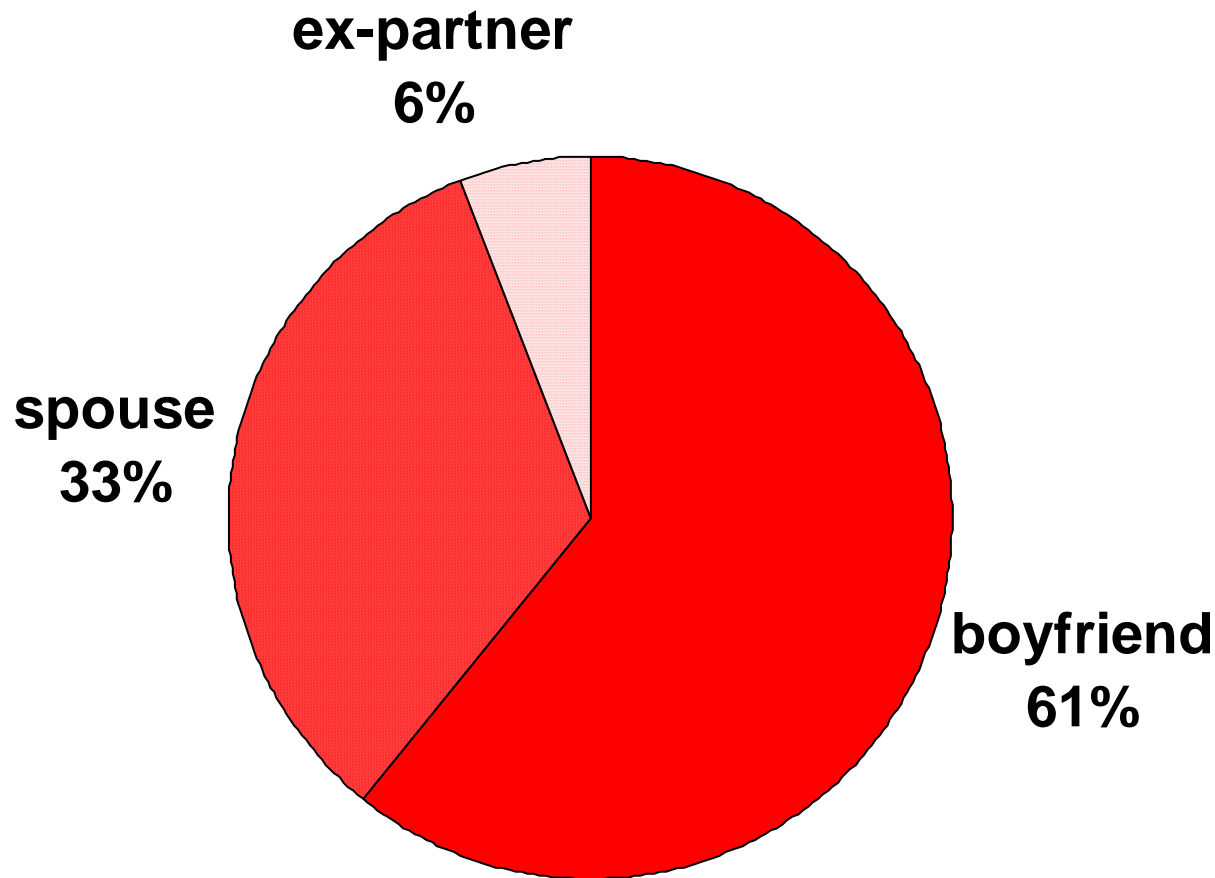
The ATR Narrative Field

- ✓ The Alaska Trauma Registry has a text field (up to 100 characters) in which the registrar can comment upon the circumstances of the injury.
- ✓ This field is not completed in a standardized manner across patient records, so bias may be introduced.
- ✓ The narrative field of all records of assault to women over 19 were analyzed and coded for description of the relationship of the perpetrator to the victim:
 - ✓ Assault considered **Intimate Partner Abuse** if boyfriend, spouse, or ex-partner
 - ✓ For those assaults to women 75 and older, assault was considered **Elder Abuse** if family or partner
- ✓ Also coded as **IPA** or **Elder Abuse** if “Domestic Violence”, “Hx of DomVio”, “Elder Abuse” indicated specifically

Perpetrator of Assault Hospitalizations, Women 20-44 Alaska Residents (N = 329), 1994-1999

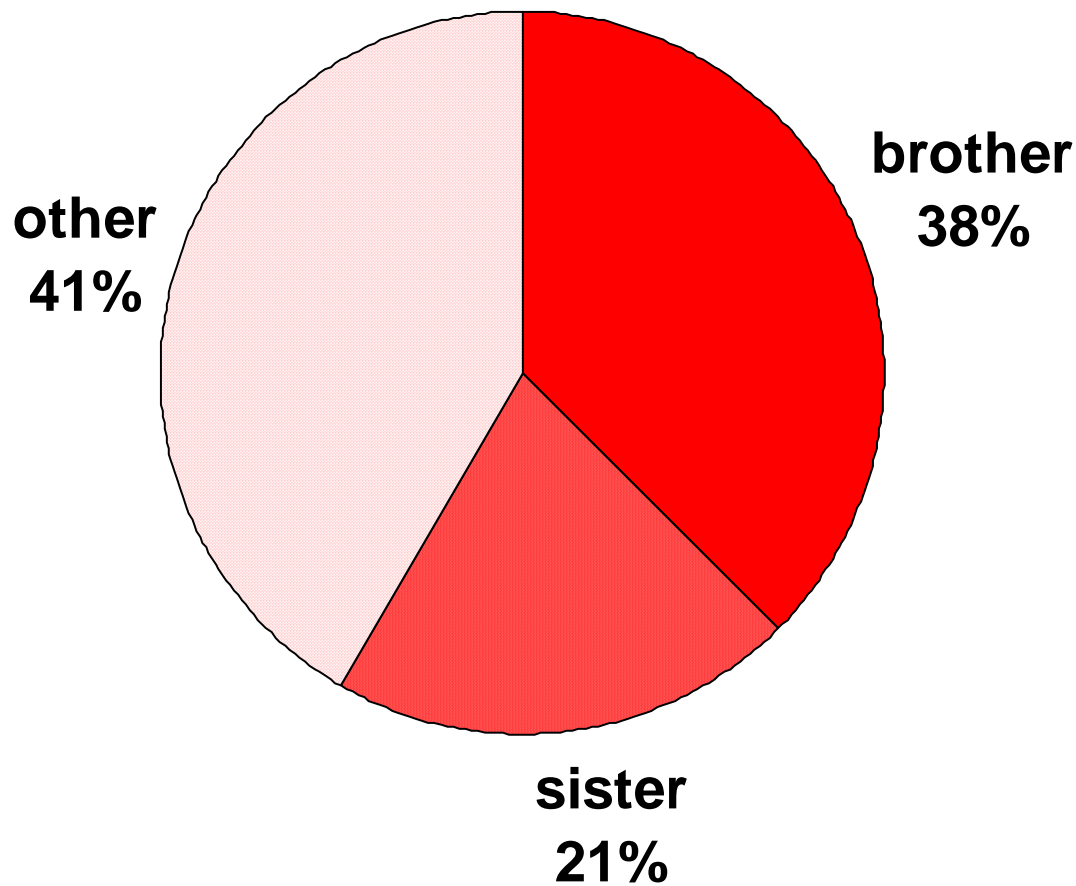


Intimate Partner Perpetrators of Assault Hospitalizations, Women 20-44 Alaska Residents (N = 135), 1994-1999



Source: DHSS/CHEMS, AK Trauma
Registry

Family member Perpetrators of Assault Hospitalizations, Women 20-44 Alaska Residents (N = 23), 1994-1999

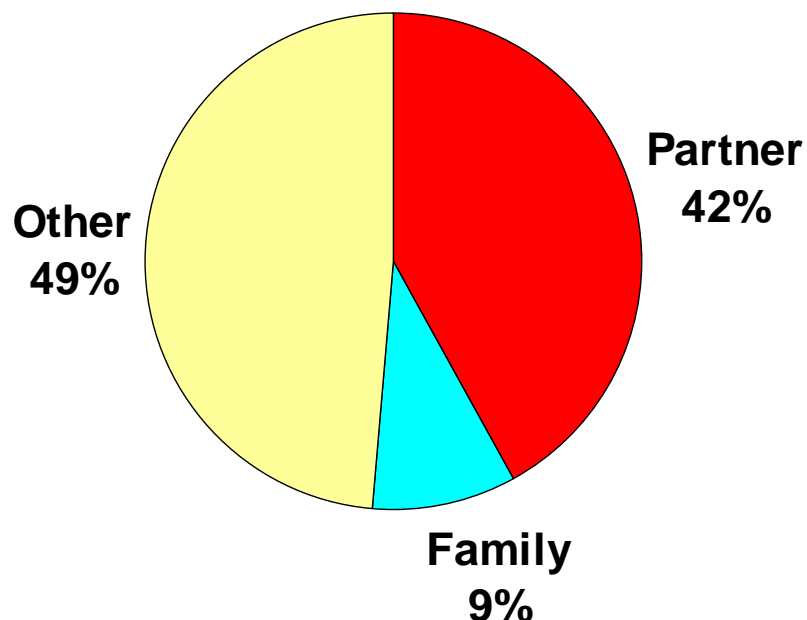


“Other” Family Members:

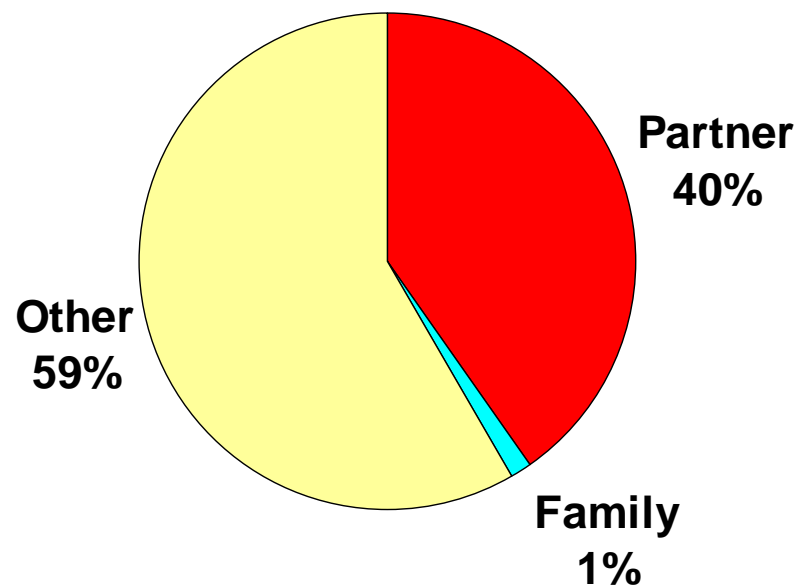
- 2 Nieces
- 1 each:
 - Nephew
 - Uncle
 - Cousin
 - Mother
 - Father
 - Daughter
 - Son
 - “Family member”

Perpetrator of Assault Hospitalizations by Race of Injured, Women 20-44 Alaska Residents (N = 306), 1994-1999

Native Women (n = 234)



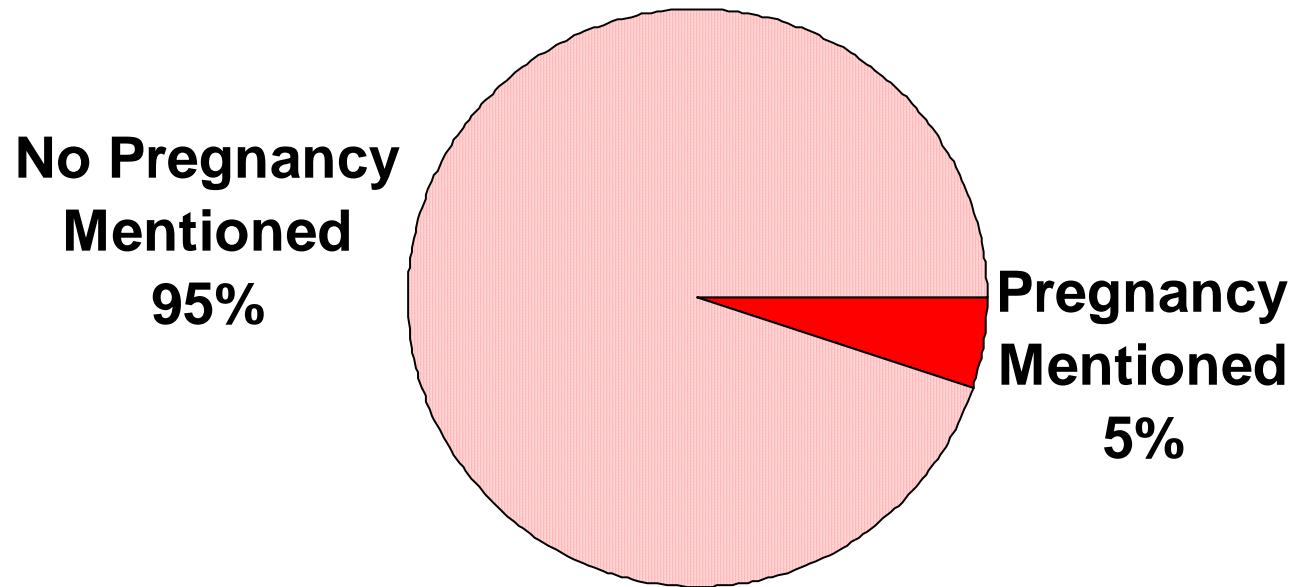
White Women (n = 72)



$\chi^2(2, n = 306) = 5.74, p = .06$

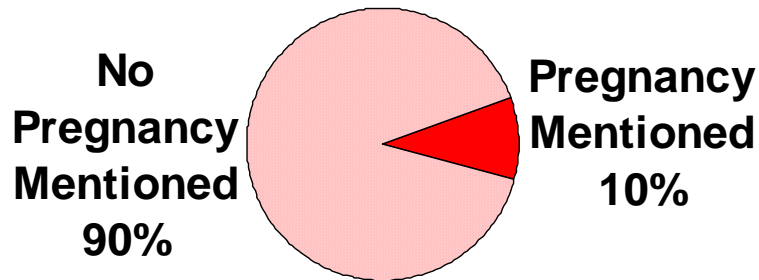
Source: DHSS/CHEMS, AK Trauma
Registry

Pregnancy Status of Assault Hospitalized Patients, Women 20-44 Alaska Residents (N = 329), 1994-1999

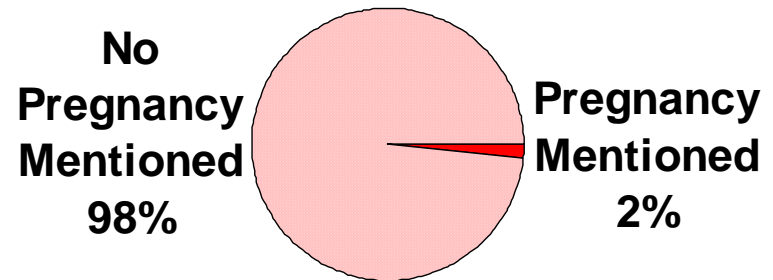


Pregnancy Status of Assault Hospitalized Patients By Perpetrator, Women 20-44 Alaska Residents (N = 329), 1994-1999

Intimate Partner (n = 135)



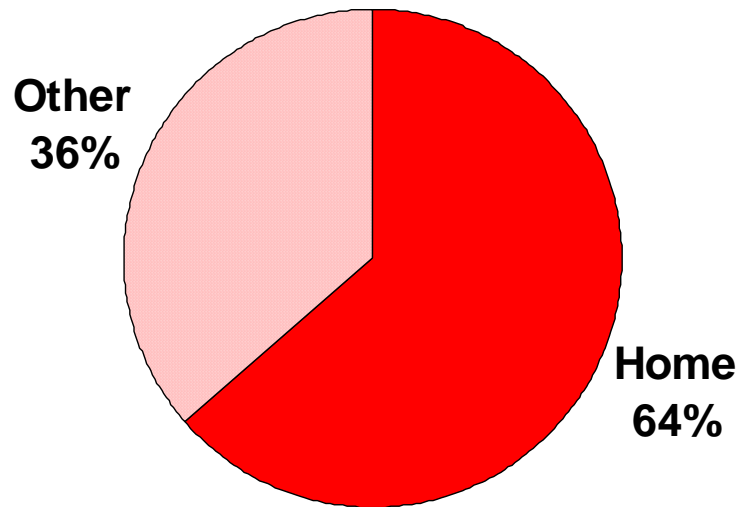
Other Perpetrator (n = 194)



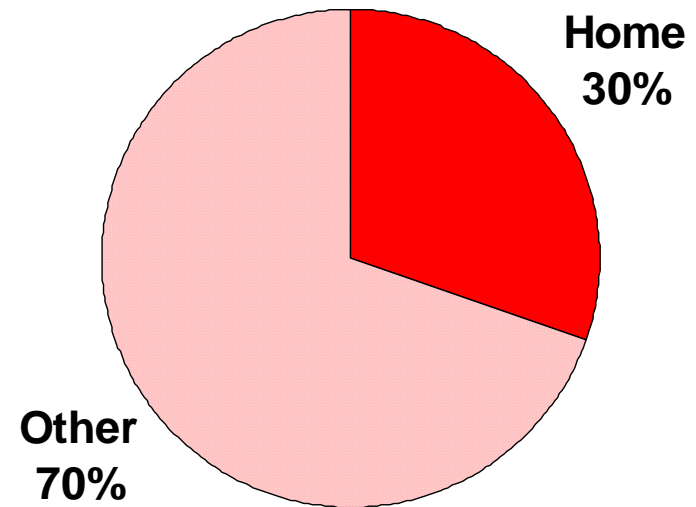
$$\chi^2(1, n = 329) = 11.2, p < .001$$

Place of Assault Occurrence by Perpetrator, Women 20-44 Alaska Residents (N = 329), 1994-1999

Intimate Partner N = 135



Other Perpetrator N = 194



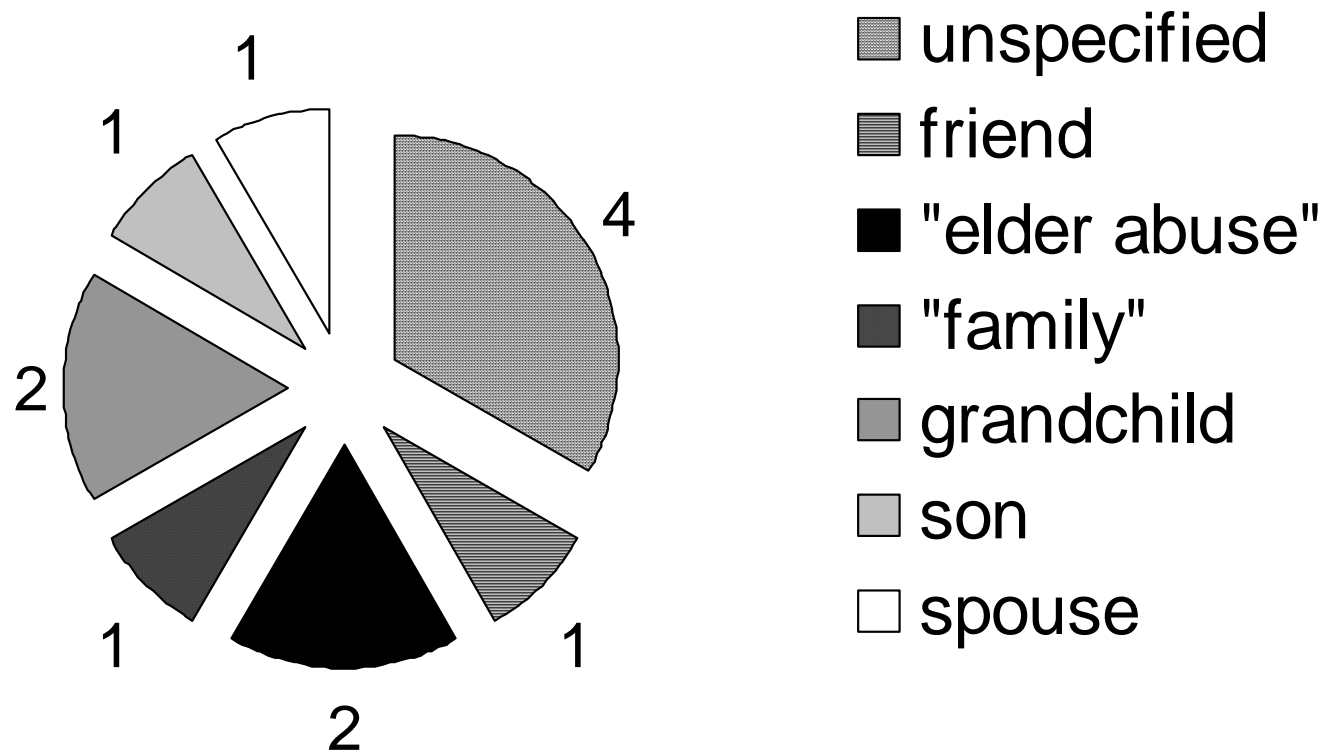
$$\chi^2(1, n = 329) = 35.8, p < .001$$

Source: DHSS/CHEMS, AK Trauma
Registry

Summary: Intimate Partner Abuse

- ✓ Of those women 20-44 hospitalized for assault injuries:
 - ✓ 41% indicated they were assaulted by an intimate partner
 - ✓ Alaska Native women reported a marginally higher proportion of assault by family member
 - ✓ 5% of hospital records noted the victim was pregnant
- ✓ Pregnancy was more likely to mentioned in cases where the perpetrator of an assault was an intimate partner.
- ✓ Assaults occurring in the home were more likely to be perpetrated by an intimate partner than were assaults occurring elsewhere.

Perpetrator of Assault Hospitalizations, Women 75+, Alaska Residents, 1994-1999



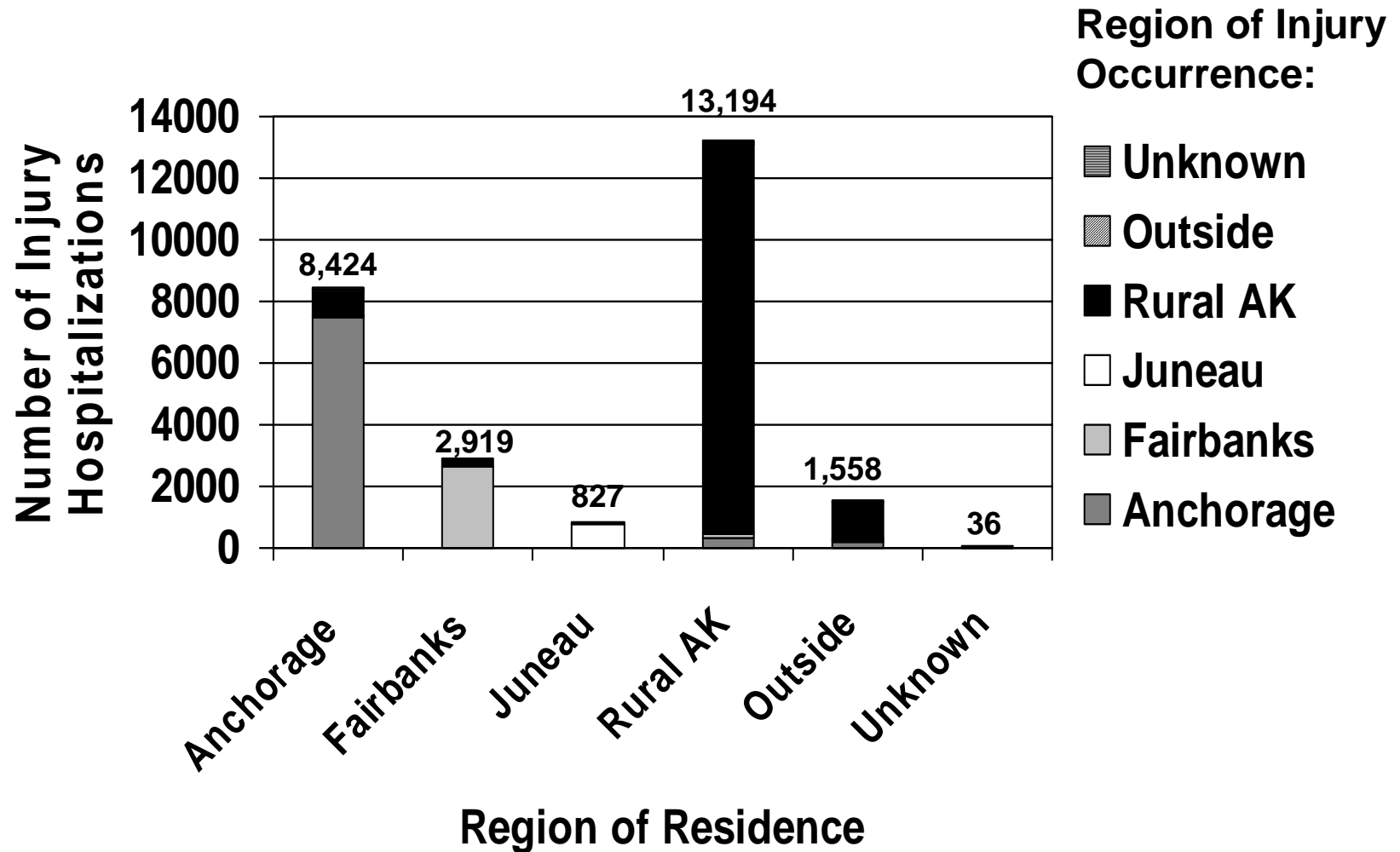
Summary: Elder Abuse

- ✓ There were 12 assault injury hospitalizations to women 75 and older from 1994 to 1999.
- ✓ 7/12 (58%) assaults were perpetrated by family member (6) or spouse (1).
 - ✓ There was no apparent difference by race.
- ✓ 10/12 (83%) assaults occurred in the home.
 - ✓ There was no apparent difference by race.

Region of *Residence*
by
Region of *Injury Occurrence*

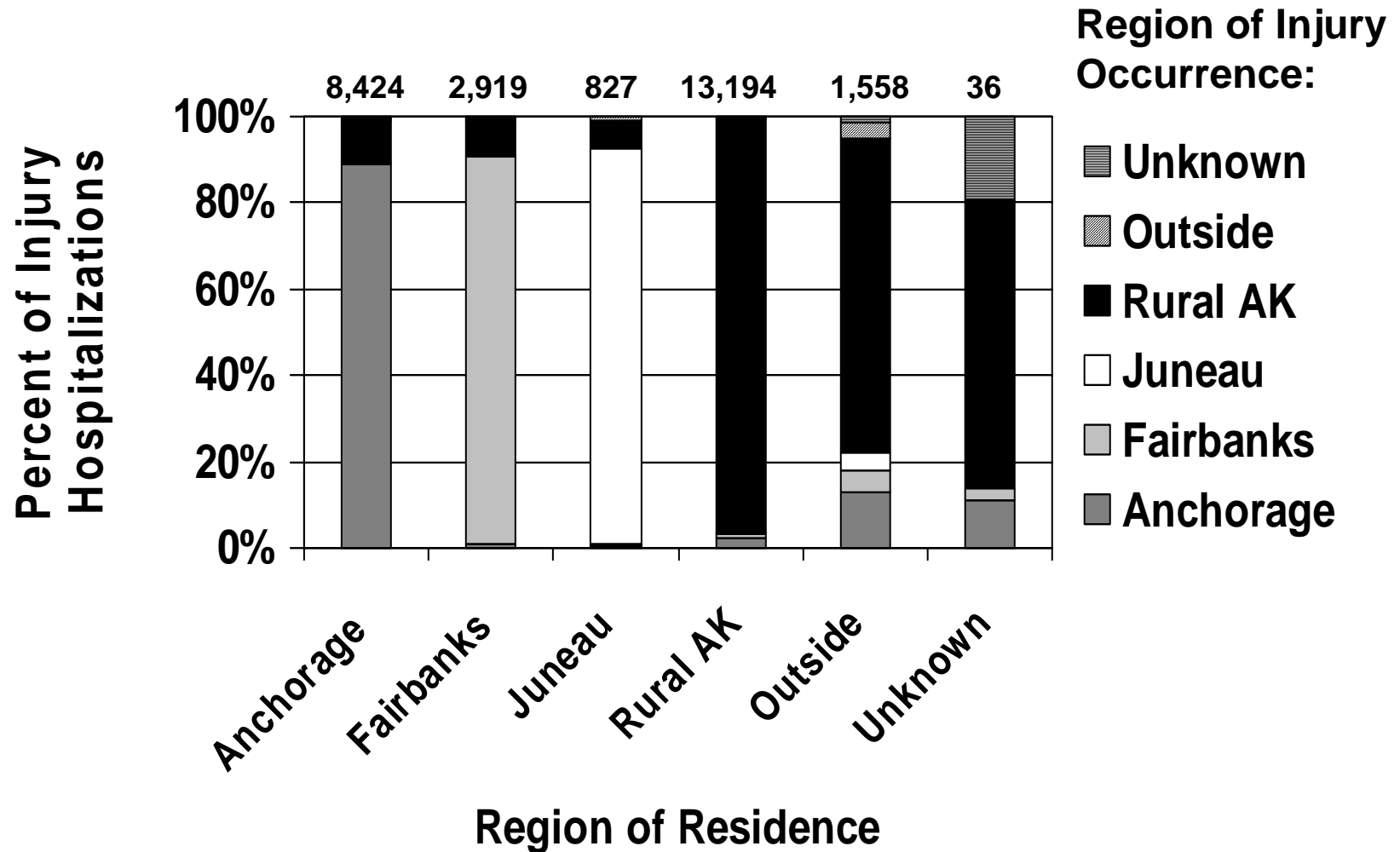
All Injury Hospitalizations
Alaska, 1994-1999

Injury Hospitalizations, Alaska 1994-1999 by Region of Residence & Region of Injury Occurrence



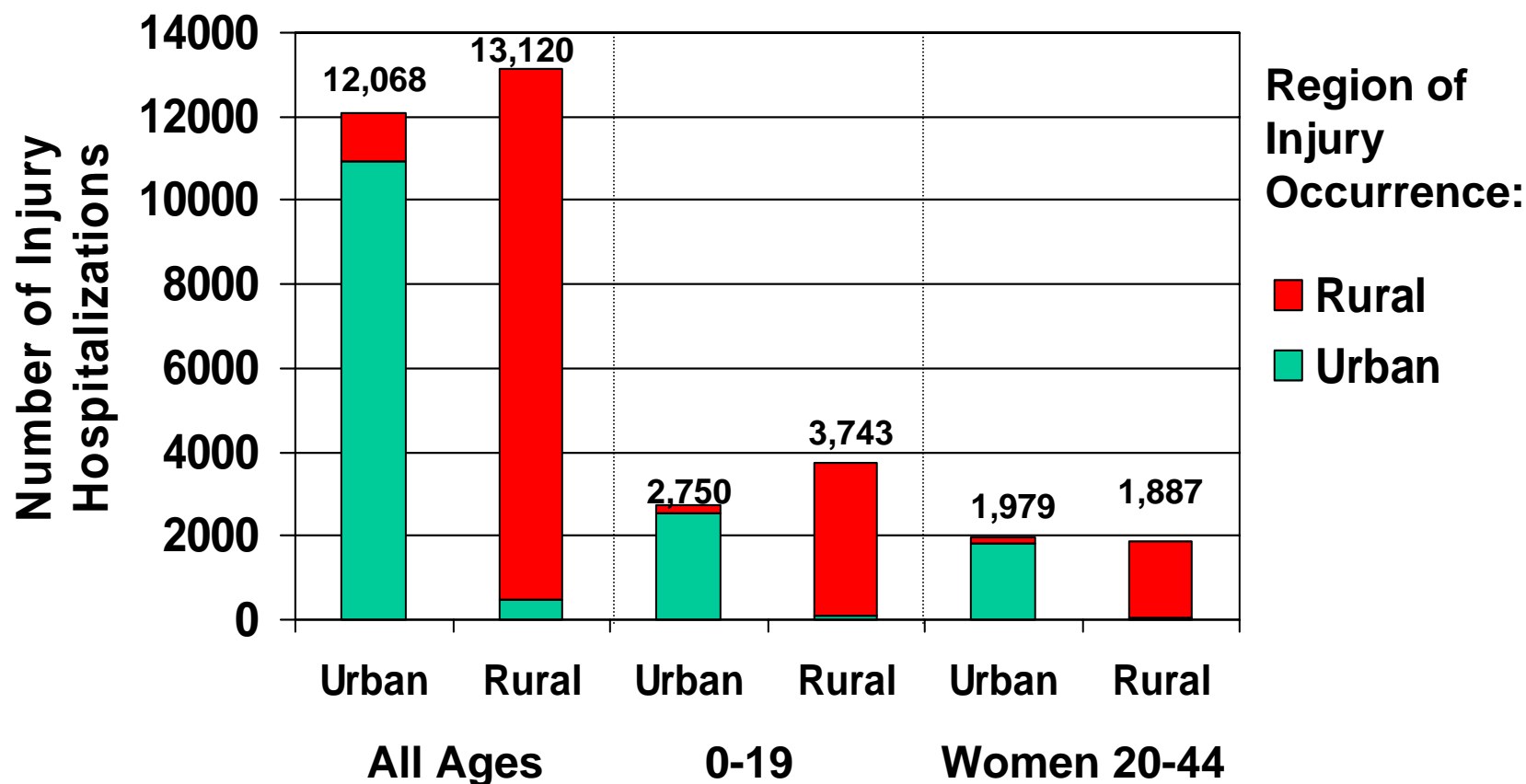
Injury Hospitalizations, Alaska 1994-1999

By Region of Residence & Region of Injury Occurrence



Injury Hospitalizations, Alaska 1994-1999

By Urban/Rural Residence & Urban/Rural Place of Injury Occurrence



Summary: Region of Residence by Region of Injury Occurrence

- ✓ The vast majority of injuries leading to hospitalization occur within the same broadly-defined region in which the injured person resides.
- ✓ A somewhat larger proportion of injuries (leading to hospitalization) to urban residents occur in rural locations compared to the proportion of injuries (leading to hospitalization) to rural residents that occur in urban locations.
- ✓ The majority of injuries (leading to hospitalization) to non-Alaska residents occur in rural areas of the state.
- ✓ These patterns vary little by age and sex group.